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SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM

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**BULLETIN**

OF THE

**UNITED STATES NATIONAL MUSEUM**

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No. 53—Part I



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1905



## ADVERTISEMENT.

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This work (Bulletin No. 53) is one of a series of papers intended to illustrate the collections belonging to or placed under the charge of the Smithsonian Institution and deposited in the United States National Museum.

The publications of the National Museum consist of two series—the *Bulletin* and the *Proceedings*.

The *Bulletin*, publication of which was commenced in 1875, is a series of elaborate papers issued separately and based for the most part upon collections in the National Museum. They are monographic in scope and are devoted principally to the discussion of large zoological groups, bibliographies of eminent naturalists, reports of expeditions, etc. The bulletins, issued only as volumes with one exception, are of octavo size, although a quarto form, known as the Special Bulletin, has been adopted in a few instances in which a larger page was deemed indispensable.

The *Proceedings* (octavo), the first volume of which was issued in 1878, are intended primarily as a medium of publication for newly acquired facts in biology, anthropology, and geology, descriptions of new forms of animals and plants, discussions of nomenclature, etc. A volume of about 1,000 pages is issued annually for distribution to libraries, while a limited edition of each paper in the volume is printed and distributed in pamphlet form in advance.

In addition, there are printed each year in the second volume of the Smithsonian Report (known as the Report of the U. S. National Museum) papers, chiefly of an ethnological character, describing collections in the National Museum.

Papers intended for publication by the National Museum are usually referred to an advisory committee, composed as follows: Frederick W. True (chairman), William H. Holmes, George P. Merrill, James E. Benedict, Otis T. Mason, Leonhard Stejneger, Lester F. Ward, and Marcus Benjamin (editor).

S. P. LANGLEY.

*Secretary of the Smithsonian Institution.*

WASHINGTON, U. S. A., June 1, 1905.



**CATALOGUE**  
**OF THE**  
**TYPE AND FIGURED SPECIMENS**  
**OF**  
**FOSSILS, MINERALS, ROCKS**  
**AND ORES**

**IN THE**  
**DEPARTMENT OF GEOLOGY, UNITED STATES**  
**NATIONAL MUSEUM**

**PREPARED UNDER THE DIRECTION OF**  
**GEORGE P. MERRILL**  
**HEAD CURATOR OF GEOLOGY**

**Part I—FOSSIL INVERTEBRATES**



**WASHINGTON**  
**GOVERNMENT PRINTING OFFICE**  
**1905**







## PREFACE.

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The catalogue herewith presented includes the types and figured specimens in the division of stratigraphic paleontology of the Department of Geology and such other materials in the division of systematic and applied geology and mineralogy as have been the subject of special investigation and publication.

In order that this catalogue may be of greatest service to the specialist, for whom it is primarily designed, the material has been arranged under four heads as below, each section being accompanied by its own explanatory introduction, as prepared by the officials in charge of the respective divisions. The arrangement, then, is as follows:

Section 1. Catalogue of the types and figured specimens of fossil invertebrates, prepared under the direction of Mr. Charles Schuchert.

Section 2. Catalogue of the types, cotypes, and supplemental types of vertebrate fossils, prepared in part under the direction of Mr. F. A. Lucas.

Section 3. Catalogue of the types and illustrated specimens of fossil plants, prepared under the direction of Dr. A. C. Peale.

Section 4. Lists of minerals, meteorites, and rock and ore collections that have been the subject of special investigation and publication, prepared under the direction of the Head Curator and Mr. Wirt Tassin.

While it can not be claimed that the catalogue is absolutely complete, the changes in the personnel of the department incidental to the withdrawal of Mr. F. A. Lucas and Mr. Charles Schuchert would seem to render its issuance in printed form advisable at the present time.

GEORGE P. MERRILL,  
*Head Curator of Geology.*

JANUARY 1, 1905.







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## SECTION I.

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# CATALOGUE OF THE TYPE SPECIMENS OF FOSSIL INVERTEBRATES IN THE DEPARTMENT OF GEOLOGY, UNITED STATES NATIONAL MUSEUM.

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By  
CHARLES SCHUCHERT,

Assisted by  
W. H. DALL, T. W. STANTON, and R. S. BASSLER.







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## INTRODUCTION.

By CHARLES SCHUCHERT.

This catalogue is an alphabetic list of all the types (holotypes, cotypes, paratypes), the subsequently described or figured specimens (plesiotypes), and the artificial casts of type specimens of fossil invertebrates in the Department of Stratigraphic Paleontology of the U. S. National Museum previous to 1905. No account is taken of "typical specimens" nor of such studied material as has served in publications but which is not so recorded in the literature of paleontology and stratigraphic geology.

The information relating to each entry is given in the following order: (1) Catalogue number of the department registers, (2) name of species practically as written in the work cited, (3) kind of type, (4) formation, (5) locality, (6) author and place of publication, and (7) remarks on the present name if different from the one cited, or a cross reference when the same species appears in the catalogue under more than one name. Some notice is taken of synonymy, but as a rule only when this had been known previous to the making of this catalogue. In the case of remarks, these are always in brackets and signed by the author of the information, when not furnished by the present writer.

No record is made of figures republished in text-books. In cases where a part of the material is lost, this fact is noted by the absence in the citation of the figures representing the missing material, no account being taken where all the specimens of an author are lost.

An author's name in parenthesis indicates that the person cited did not use the genus or combination as given. It has not been thought necessary to give the author who first made the change as adopted in this catalogue.

This catalogue was begun in response to a circular letter by the late Dr. G. Brown Goode, dated December 17, 1895. He wrote:

I am anxious to include a statement exactly, or approximately, showing the number of species, represented by types, in each department. \* \* \* It is proposed to publish at an early day a series of full catalogues of the type specimens in the several departments of the museum.

At that time no catalogues of this nature had been prepared, nor were all the type specimens distinguished in the collection. The writer then made a card catalogue of the Paleozoic forms, while Dr. T. W. Stanton and Dr. W. H. Dall assisted with the Mesozoic and Cenozoic species,



and on March 9, 1896, the presence of type material for 3,603 animal species was reported.

Since that time the writer, with the assistance of Messrs. Dall, Stanton, T. W. Vaughan, Ralph Arnold, R. S. Bassler, and Miss M. W. Moodey, has kept the catalogue up to date. The preparation of the office catalogue for the printer was done by Mrs. M. S. F. Jouy and Miss Lucy Graves.

Type specimens have come to the U. S. National Museum in an ever-increasing quantity, and in the purchase of the E. O. Ulrich collection not less than 1,600 species were added during the past four years. The R. D. Lacoe collection furnished about 200 species, chiefly insects. This catalogue records not less than 11,490 type specimens in the National Museum, representing about 6,100 species of fossil invertebrates distributed through the various sections of the department, as follows:

	Specimens (about).	Species (about).
Paleozoic invertebrates .....	6,310	2,803
Mesozoic invertebrates .....	2,683	1,291
Cenozoic invertebrates.....	2,226	1,781
Fossil insects .....	271	225
Total .....	11,490	6,100
Holotypes .....	2,730	2,730
Paratypes and cotypes.....	4,996	1,878
Plesiotypes and plastotypes .....	3,764	1,492
Total .....	11,490	6,100

The type specimens are largely from North America, but there is also material from the West Indies, from Brazil, Chile, Peru, New South Wales, and Arctic Siberia.

It can be stated with considerable certainty that the larger American museums have carefully guarded the safe-keeping of fossil type specimens. As long ago as 1853 Louis Agassiz<sup>a</sup> wrote of the importance of type specimens. Here he reviews a "Catalogue of the Cabinet of Natural History of the State of New York" and says:

The regents of the University deserve great credit for directing the publication of this catalogue. Nothing is better adapted to secure permanently the interest for public collections and to contribute to their increase than the circulation of such catalogues. We only regret that no more direct reference is made to the individual specimens described and figured in the Natural History of New York. The importance of preserving such records to favor the researches in case of doubts, upon the identity of newly discovered species, can not be overrated, and we would particularly call the attention of all directors of museums to this point. The chief value of many of the museums of Europe arises from the circumstance that they contain the original specimens described by the naturalists who have brought our science to its present condition.

<sup>a</sup> American Journal of Science, XVI, pp. 283-284.



In 1860 Spencer F. Baird, then assistant secretary of the Smithsonian Institution, said in the annual report of that year:

The great value of the museum of the Institution at the present time consists in its being the depository of so many type specimens, or those upon which the first description of species has been established. These constitute the great attraction to the scientific investigators, as, however carefully prepared, the published description or figures of any species may be, there is almost always some doubtful point to be settled alone by examination of the types. For this reason these are always guarded with jealous care, and considered of much more value than new and undescribed materials (p. 76).

In the following year, however, we find the Institution adopting a rule to "distribute as widely as possible to scientific institutions \* \* \* the duplicate type specimens" (p. 41). In all probability this referred rather to typical specimens than to type specimens in the modern sense, yet it seems that some types have been either given away or lost through the neglect of authors to return all the material loaned them for study. However, not many types have been lost during the past fifty years, probably less than 100 specimens. Some of these are known to be in other museums, but as they were collected on Government expeditions they should seemingly be in the National Museum.

#### ON TYPE SPECIMENS IN NATURAL HISTORY.

Most naturalists now concede that type specimens constitute the most important material in a museum of natural history. The true appreciation of this fact, however, has become general only very recently, as shown in the numerous lately published catalogues of types possessed by different museums. Nearly all of these publications have appeared in America and England. This just valuation of type material in recent years has come about through the work of specialists in their efforts to monograph groups of organisms. In those branches of biology where original descriptions are usually accompanied by figures the value of type material is not so apparent as where no illustrations are given. It is, however, upon the type material that the entities of natural history rest. Therefore it is of the greatest importance to learn the whereabouts of types.

There is considerable diversity of opinion as to what is meant by a type. Professor Marsh<sup>a</sup> writes:

A type in Paleontology should consist of the remains of a single individual, and this should stand as the original representative of the name given. A second specimen, or even more, may be used later to supplement the first, but not to supplant it. This, however, has been done by some authors, with the natural result of causing endless confusion in the nomenclature.

Oldfield Thomas<sup>b</sup> states:

The word "type" itself when first introduced was meant to refer to the particular specimen (in the singular) originally described, but it soon was naturally applied to

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<sup>a</sup> *American Journal Science*, VI, 1898, p. 402.

<sup>b</sup> *Proc Zool. Soc* for 1893, p. 241.



any individual of the original series, if more than one specimen was examined by the describer. In this there was little cause for confusion, but more recently it has been applied to any individual from the collection of the original author, obtained no matter how much later, and often not even determined by him as belonging to his species. Of late a still further cause of confusion has been introduced by certain authors who, obtaining specimens from the typical locality, have spoken of them as "typical specimens," a method of reference which, although due to a praiseworthy regard for geographical exactness, is yet certainly liable to give rise to inconvenience and confusion.

The late Dr. G. Brown Goode, in a circular letter to curators in the U. S. National Museum, dated July 1, 1893, wrote that—

By a type is meant a specimen which has been used by the author of a systematic paper as the basis of detailed study, and as the foundation of a specific name. In cases where a considerable number of specimens has been used it is desirable to separate one or more as being primary types, while the other specimens, which may have been used in the same study for the purpose of comparison, may be regarded as collateral types.

These citations show clearly that a type is not always restricted to a single specimen selected by an author, but also applies to several or even to all the specimens contained in the original lot. Moreover, the word type has been applied to specimens sent out by the author of a species, but not used in the original description. Students of parasitic insects often rear numerous individuals from a single mother of a new species, any one of which is naturally as much like the type as those selected by the author. Some of the individuals of such broods are distributed to other workers and museums as types. For a clear description of a new species a paleobotanist may require as many individuals as there are specimens selected for study, all of which are regarded as types. Because of the general imperfection of fossils, much of the original material is usually accepted by paleontologists as types; but when specimens are figured, as is generally the custom, it is good practice to regard these alone as types. The writer is not aware that any invertebrate paleontologist in America until recently considered a species to be based upon a single specimen if others are present at the time of original publication. It is doubtful if many species, living or extinct, can be defined from a single individual; hence a multiplicity of types is generally a necessity. In birds and mammals, where the sexes usually exhibit marked differences, there are seasonal modifications, a bony skeleton, geographical and individual variation, and stages of growth, and all these parts and variations require material for the proper and final interpretation of species. The practice of selecting a single example as the type, however, has its advantages, since all doubt is thus removed when a new species is later found to contain diverse elements.

The writer and others believe that terms are necessary to distinguish the various kinds of type specimens. This is seen by the continually



wider acceptance of the terms proposed by Thomas, Schuchert, and Cossmann. In regard to the desirability of type terms, Bather<sup>a</sup> states:

This \* \* \* shows how necessary the definition of these terms has become. It also exemplifies a danger that needs constant guarding against, namely, the employment of a common word in a restricted \* \* \* sense. The man in the street knows the meaning of "type" and "typical," but the meaning of those terms to the zoologist is something quite different.

The following classification of type specimens is an expression of individual opinion, in the hope that biologists will, when necessary, emend the different definitions here given or offer new ones, so that a proper terminology in regard to type specimens may come into general use.

#### CLASSIFICATION OF TYPE SPECIMENS.

All type specimens in biology may be divided into two groups—type material and typical specimens.

**TYPE MATERIAL** includes all specimens which have served as the basis for published primary and supplementary descriptions and figures of organisms. These are again divisible into two sections—primary and supplementary types.

**PRIMARY TYPES, or PROTEROTYPES.**—These are the original specimens of any described or figured new species. In a letter to the writer, Buckman has proposed for the English term the collective name **PROTEROTYPES**. They are usually referred to by zoologists, botanists, and some paleontologists as "types." Primary types are again divisible into **HOLOTYPE**, **COTYPE** (or **SYNTYPE**), **PARATYPE**, **LECTOTYPE**, and **CHIROTYPE**.

**SUPPLEMENTARY TYPES.**—These consist of the described or figured specimens used by any author in supplementing or correcting knowledge of a previously defined species. This section is divisible into **PLESIOTYPE**, **NEOTYPE**, and **HEAUTOTYPE**.

**TYPICAL SPECIMENS, or ICOTYPES.**—These have not been used in published descriptions or figures, but consist of material which authors have worked on or such as has been or can be collected at the original localities of new species. In a letter to the writer, Buckman proposes for these types a good collective term—**ICOTYPES**, meaning that which is like, probable (= types having resemblance to proterotypes). Typical specimens are divisible into **TOPOTYPE**, **METATYPE**, **HOMCEOTYPE**, and **IDEOTYPE**.

Besides "type material" and "typical specimens" there are other entities of a type nature to which authors have seen fit to apply a terminology. Such are "type drawings," "reproductions of type specimens," "type species of genera," and "types of organisms in relation to geographic distribution." These will be defined further on.

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<sup>a</sup>Science, May 28, 1897, p. 843.



## PRIMARY TYPES, OR PROTEROTYPES.

**HOLOTYPE** (Schuchert, 1897).—A holotype in natural history is a particular individual deliberately selected by the author of a species, or it may be the only example of a species known at the time of original publication. A holotype therefore is always a single individual, but may embrace one or more parts, as the skin, skeleton, or other portions, such as the obverse and reverse of a natural mold. When a holotype is selected, but other specimens are also described, the latter must be known as paratypes. When no holotype is selected, and more than one specimen is described, all become cotypes. Therefore, the original material of any species can not include a holotype and cotypes, but may include a holotype and paratype, or all may be cotypes.

Among zoologists and botanists, it is almost general to use the term "type" in the sense that holotype is here used. Palmer<sup>a</sup> defines type as follows: "A type is the identical individual specimen from which a species has been described." Underwood<sup>b</sup> states: "By a type is meant botanically the original specimen from which the species was described when it was first made known."

In cases where a holotype is selected, but is neither marked nor a description given to distinguish it from the associated materials, the holotype practically does not exist.

In cases where a holotype has been selected, but the diagnosis is found to contain more than one species, the remaining material will always constitute the paratypes of the original description. These will not necessarily remain as such under another name.

The author of a new species having failed to select a holotype, no subsequent author can do this for him. No just law is retroactive. However, when but a single individual is figured, the original of the **PROTOGRAPH** (new) is to be regarded as the holotype. (**PROTOLOG**=original description; **PROTOGRAPH**=original figure, according to Buckman.)

Where the sexes are different and can be distinguished, a male or a female specimen should be selected as the holotype, but not both.

A species described as new, and proving to be a synonym, does not affect the type material of the species with which it is synonymous. All such synonymous material, however, should be carefully preserved and marked as holotype or cotype under the original name as well as under the one of which it is known to be a synonym.

To the writer it does not seem necessary to coin other terms for parts of a holotype where species are made up of separable parts. In all such cases exactness can be secured by writing holotype (obverse), holotype (dorsal vertebra), holotype (right valve), etc.

See also neotype.

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<sup>a</sup> *Index Generum Mammalium*, 1904, p. 20.

<sup>b</sup> *Science*, July 21, 1899, p. 72.



**COTYPE** (=associate type, or **SYNTYPE**<sup>a</sup>).—Cotype was apparently first introduced by Waterhouse, and is redefined by Oldfield Thomas as follows: "A cotype is one of two or more specimens, together forming the basis of a species, no type [holotype] having been selected. No species would have both type [holotype] and cotypes, but either the former [or holotype and paratype], or two or more of the latter." In cases where the cotypes are unmarked and can not be distinguished from the balance of the original series, the only safe plan will be to regard all the original material of a new species as cotypes. If such specimens are subsequently sent out to collectors and museums they should be marked as cotypes.

Cossmann<sup>b</sup> states "as for 'cotype' and 'paratype', one questions if it is really worth while to name them, especially where the type has been designated; and if that has been lost, it is necessary then to substitute a 'neotype.'" To the writer this conclusion appears faulty for the following reasons: When a holotype is selected, or because it is the only specimen on which the species rest, then Cossmann's conclusion of course follows. However, in all those cases where an author has more than one specimen of his new species, why are not these of far more value in understanding the intention of the original describer than any neotypes? For instance, when an author selects a holotype out of several specimens, and it is lost, are we not obliged to consider first the remaining specimens, the paratypes, rather than other material selected by another and later author (neotypes)? In the case of cotypes, so long as one remains to us we are similarly obliged to consider it first, in connection with the original description and figures. The terms cotype and paratype are automatic in application, for if an author selects no type out of several specimens all become cotypes, and if he selects a holotype the remainder are paratypes. These terms, it is true, have as a rule no special value in the original descriptions of species, but to subsequent workers and above all to keepers of public collections they have considerable worth in that they indicate the exact nature of their type material.

See synthetograph and heautotype.

**PARATYPE** (*para*=beside).—Thomas states: "A paratype is a specimen belonging to the original series, but not the type [holotype], in cases where the author has himself selected a type [holotype]. It should, however, be one of the specimens mentioned or enumerated in the original description."

A paratype may be subsequently selected as a holotype when it proves to be a new species and is not the species to which it was originally referred.

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<sup>a</sup>[F. A. Bather.] *Scientific Volupuk*, Natural Science, IV, Jan., 1894, p. 57.

<sup>b</sup>*Revue Critique de Paléozoologie*, April, 1904, p. 74.



For further remarks, see cotype.

**LECTOTYPE** (new).—Where the original diagnosis is without illustrations or is accompanied by figures based on two or more specimens, the first subsequent author is at liberty to select from these cotypes a type for the old species, adhering, as far as can be ascertained, to the intention of the original author. Such a type specimen is to be designated as a **LECTOTYPE** (=a chosen type). From the remaining cotypes, or from other material in his possession, he may select the holotype or cotypes of his new species.

**CHIROTYP** (new).—This term is proposed for the material upon which a published manuscript name is based. It is a term equal in value to "Chironym: A manuscript name; an unpublished name."<sup>a</sup> The former applies to specimens, the latter to the written name. Just as soon as a chirotype is properly published, the term will no longer apply to it, and the material will become either a holotype, paratype, or cotype.

#### SUPPLEMENTARY TYPES.

**PLESIOTYPE**.—Cossmann<sup>b</sup> first proposed this term with two meanings, which Buckman, in a letter to the writer, summarizes as follows:

1. A species akin to the monotype representative of the genus at another geological horizon or in another zoological province.
2. A specimen, not a topotype, figured or described as an example of an already named species.

In 1904, Cossmann redefined this term in accordance with his second meaning, and it is in this sense that the present writer uses it in this catalogue. He states:

An individual [of a described form], whether from the same locality or from another deposit, which one compares with a species and for which one gives a new description and a new figure, is a plesiotype of that species.

In 1897, Schuchert proposed for identical material the term **HYPOTYPE**, which is therefore a synonym of Cossmann's name. Further, hypotype is in use with another meaning: "Subtypical; not quite typical." (Cent. Dict.)

Thomas<sup>c</sup> thinks this term (hypotype=plesiotype) "too general to be of much definite use." This criticism has also been made by others, but the writer fails to see what can be gained by dividing these supplementary types into different categories. After all, it is the primary types on which the taxonomy rests, and the supplementary types (plesiotypes) simply help to elucidate the original material. The only other kind of supplementary types worthy of distinction are those selected plesiotypes on which the species will rest when the original types are lost, destroyed, or inadequate for the determination of the specific characters. These have been named by Cossmann **NEOTYPES**.

<sup>a</sup> *Coues, Auk, IX, 1884, p. 321.*

<sup>b</sup> *Essais de Paléoconchologie comparée, 1896, pp. 2, 3.*

<sup>c</sup> *Science, Sept. 24, 1897, p. 486.*



**NEOTYPE.**—Cossmann, in proposing this term, gave it also two meanings, which are summarized by Buckman as follows:

1. A species taken as the type of a genus of which no type was originally indicated, while the species first mentioned by the author has been made the type of another genus.

2. A topotype figured or described to represent a species of which the original specimen [holotype] has been lost or destroyed.

The term is here used as redefined by Cossmann in 1904, on the basis of his second meaning, as follows:

Neotype for the specimen afterwards taken as the type of a species when the original type [holotype] has been destroyed or has disappeared with the necessary guaranty of its authenticity; but it seems indispensable that the new specimen should come from the same locality and exact horizon.

The writer would use this term not only as limited by Cossmann, but would have it embrace all such subsequent specimens of a species as become the standard for reference, owing to the original types being lost, destroyed, or unrecognizable, or inadequate for the determination of the specific characters. Among invertebrate species neotypes will, as a rule, be restricted to Cossmann's definition, but among vertebrates and plants the term will be used for individuals more perfectly preserved than the holotypes.

In this connection a statement by Marsh<sup>a</sup> is appropriate:

Among the invertebrates, especially those now living, types [=holotypes] are usually complete enough to show the more important features. \* \* \* Among the vertebrates of the past the case is much more serious. \* \* \* A single tooth or a vertebra may be the first specimen brought to light in a new region, and thus become the sole representative of a supposed new form. The next explorer may find more perfect fragments of the same or similar forms, and add new names to the category. A third investigator, with better opportunities and more knowledge, may perhaps secure entire skulls or even skeletons from the same horizon, and thus lay a sure foundation for a knowledge of the fauna.

It would seem that any specific name based on a fragment or part of an organism, even though it be but a single tooth, fragment of an ammonite, or a leaf, should for all time, whether extant or not, be the holotype of the species. In fact any specific name must continue to rest upon the originally selected material, for otherwise nomenclature will have no permanency. But in many cases, and this is especially true of such organisms as are built up of separable parts, it seems advisable, when the holotype is inadequate, to select a second type—a neotype. The neotype is of course a supplementary type, as it is not one of the original or primary types.

This term can be also applied to specimens, the import of which fact was called to the writer's attention by Bather.<sup>b</sup> He asks:

When the holotype and paratypes of a species have gone the way of all flesh; when topotypes are impossible and metatypes unknown; when even its plastotypes

<sup>a</sup> *American Journal Science*, VI, 1898, pp. 401, 402.

<sup>b</sup> *Science*, May 28, 1897, p. 844.



are not to be had, then what are we to call the specimen selected for special description by the reviser and reestablisher of the species?

The writer would therefore define a neotype as a supplementary type selected by an author, on which a species is to rest because of the loss of the original type or where the original material still extant is so poor or fragmentary that from it the characters of the species can not be determined with certainty.

**HEAUTOTYPE** (new).—In a letter to the writer, Buckman proposes this term for “a specimen figured by an author as an illustration of his own already founded species such not being a proterotype” (=primary type). The same writer, in 1899, used the term autotype, but as this word is also in use for certain printing blocks he changes it here to heautotype.

#### TYPICAL SPECIMENS, OR ICOTYPES.

**TOPOTYPE** (Thomas).—A specimen collected at the exact locality or within a few miles of the place where the original type of a species was obtained.

In paleontology it is further demanded that the topotype should come not only from the exact locality but also from the identical stratum that furnished the species.

Topotypes and metatypes have been wrongly included by Ehlert (*Palaeontologia Universalis*, 1904) under Schuchert's term “supplementary types” or hypotypes (=plesiotypes). These specimens have not the value of “type material” as here defined, but belong to the category of “typical specimens.”

**METATYPE** (Thomas).—“A specimen received from the original locality [in paleontology, the exact stratum as well] after the description has been published, but determined as belonging to his own species by the original describer himself.” (See ideotype.)

Metatype has been redefined by Walsingham and Durrant<sup>a</sup> as follows: “A specimen subsequently named by the author after comparison with the type is called a Metatype.” As this is not the meaning given by Thomas, it can not be accepted. The latter<sup>b</sup> says:

The objection to “hypotype” [=metatype] as being too general and covering too many specimens of different origins applies even more strongly to Lord Walsingham and Mr. Durrant's proposed extension. \* \* \* Many a museum worker, who has to name large series of specimens from all sorts of localities, must constantly put under one of his own names specimens which may be anything but typical, and it would be absurd to call the whole of a museum series of a common animal “metatypes” merely because the name of the species happened to have been proposed by the person who determined the specimens.

**HOMŒOTYPE**.—Under the name **HOMOTYPE**, Walsingham and Durrant define this term thus: “A specimen named by another than the author, after comparison with the type, is called a Homotype.” How-

<sup>a</sup> Merton Rules, London, 1896 p. 13.

<sup>b</sup> Science, Sept. 24, 1897, p. 486.



ever, as this word has a different usage in biology, it can not be employed with another meaning. It is therefore changed to homœotype (= similar type).

Thomas,<sup>a</sup> in regard to this term (homotype),<sup>b</sup> says that it "might suitably be employed for any specimens that had been compared with the type." The term is a very useful one, and large museums now have abundant opportunities to mark such material. The writer, therefore, will define it as follows:

A homœotype is any supplementary specimen that has been carefully compared with the primary types by any worker of recognized standing in the class of organisms to which the material belongs.

IDEOTYPE (new).—Dr. S. S. Buckman has called attention to other typical specimens which he calls ideotypes. These are the specimens from any place except the original locality, named by an author of a species after publication. When similar specimens are from the original locality they are metatypes.

#### TYPE DRAWINGS.

PROTOGRAPH (new).—Buckman suggests this term for the original figure or figures illustrating a holotype. The original description is the protolog.

SYNTHETOGRAPH (new).—Authors occasionally base a new species upon several specimens, illustrating the form by a drawing which subsequent authors assume to be based on a single individual, but which in reality is a composite figure. Buckman<sup>b</sup> states: "Notice may be taken of the cases wherein a figure has been made from a combination of two specimens. This practice would easily lead to a nonidentification of the types unless the facts had been carefully noted. It is an undesirable practice."

When no type is selected by the original author, it has become the custom for subsequent workers to accept as the holotype the specimen which had been delineated, the delineation being the protograph. But when it happens that the delineation has been drawn from more than one specimen, such a composite figure should be distinguished as a SYNTHETOGRAPH; and the specimens from which the figure was made become cotypes. The term is applicable only to the illustration. The making of such drawings to-day is rare, but in the earlier days of paleontology this was not the case. The practice is to be condemned, but a term is needed for such drawings as have been made.

#### REPRODUCTIONS OF TYPE SPECIMENS.

In 1897 Schuchert proposed the term PLASTOTYPE for any artificial specimen molded directly from a primary type. There are many specimens of this kind in existence, cast directly from primary or secondary

<sup>a</sup> *Science*, Sept. 24, 1897, p. 486.

<sup>b</sup> *Proc. Cotteswold Nat. Field Club*, XIII, 1899, p. 134.



types. These plaster of Paris, sulphur, or lead castings, gutta-percha squeezes, or electrotypes are often quite as good as the originals. No models, however, are included, since they are not cast from type material.

### TYPES OF GENERA, OR GENOTYPES.

In 1897 Schuchert proposed the term GENOTYPE for "any typical material of the type species of a genus." Subsequently he, as well as others, applied this term to the selected type species (not upon the specimens, as is stated in the original definition) upon which the genus is based. The original definition is undoubtedly wrong, because genera are not based upon particular individuals, but upon species as a whole. In a letter to the writer (January 9, 1905), Buckman suggests that *geno* be prefixed to the primary type terms, thus making a "completely congruous series." With this suggestion, the following terms result:

GENOHOLOTYPE.—The one species fixed by an author as the type of a genus.

GENOSYNTYPES.—More than one species are mentioned by authors as the types of a genus, but no one is definitely selected. These may be monotypical or heterotypical.

GENOLECTOTYPE.—A species subsequently selected by an author as the genoholotype of a genus, from genosyntypes.

Some years ago Walsingham and Durrant<sup>a</sup> proposed a set of similar terms, but as most of them are preoccupied names they are not adopted here. However, to complete this article of definitions, they are here reproduced:

A genus from its foundation belongs to one of three classes:

(1) Monotypical (*i. e.* described from a single species, no other being known; or described from a single specified species with which are associated other species considered to be identical in structure).

[The word monotype is also in use for printing apparatus.]

(2) Isotypical (*i. e.*, described from more than one species, all of which are congeneric). [The term *isotype* was used by Gill in 1881 with a different meaning. It is defined on a later page.]

(3) Heterotypical (*i. e.*, described from more than one species, these differing in structure).

### TYPES OF ORGANISMS IN RELATION TO GEOGRAPHIC DISTRIBUTION.

MIMOTYPES (*mimic* and *form*): Forms distantly resembling each other, but fulfilling similar functions, and thus representing each other in different faunas; *e. g.* (1) the Shrews of Europe are mimotypes of the Antechinus of Australia; (2) the Sloths of South America of the Phascolarctidæ of Australia, etc. By the use of this term the word "analogue" may be relieved of a part of the burden borne by it.

ISOTYPES (*equal* or *like* and *form*): Forms common to different countries; *e. g.*, the Shrews are isotypes in Europe and North America, etc. [*Productus punctatus* and *P. semireticulatus* are isotypes of different Carboniferous seas.]

<sup>a</sup> Merton Rules, London, 1896, p. 14.



**NECROTYPES** (*dead* and *form*): Forms formerly existing in a country but now extinct; *e. g.*, the horses and rhinoceroses are necrotypes of North America, indigenous species having once flourished on that continent, but become exterminated in prehistoric [or previous geologic] times.<sup>a</sup>

The Century Dictionary defines this term thus: "A type formerly extant in any region, afterwards extinct; thus, indigenous horses and rhinoceroses are *necrotypes* of North America."

#### MARKING OF TYPE MATERIAL.

All type material should be plainly and permanently marked to distinguish it from other specimens. If this is carefully done, much doubt will be removed for subsequent students. When such material is large, as birds and mammals, a small highly colored card or a piece of plain zinc may be attached, upon which should be printed or stamped the proper term indicating the kind of type and the museum catalogue number. In paleontology, it is the custom to glue small red or green diamond or star-shaped tickets upon the type material, in addition to the catalogue number, when sufficiently large to permit of this without covering too much of the specimen. The small specimens are placed in numbered vials or in boxes. In the Woodwardian Museum (Cambridge, England), type fossils are mounted on blue tablets. This arrangement, however, has the disadvantage of giving the exhibition series a checkered appearance, and should the specimens become loosened and displaced there is danger of the types being overlooked.

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<sup>a</sup> Gill, *Smithsonian Report for 1881 (1883)*, p. 460.



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UNDERWOOD, LUCIEN M.—The Royal Botanic Gardens at Kew. *Science*, July 21, 1899, pp. 65-76.

WALSINGHAM (LORD) and DURRANT, JOHN HARTLEY.—Rules for regulating nomenclature, with a view to secure a strict application of the law of priority in entomological work [also known as the Merton Rules]. London, 1896.

WOODS, HENRY.—Catalogue of the type fossils in the Woodwardian Museum, Cambridge. With a preface by T. McKenny Hughes. Cambridge Press, 1891.



# CATALOGUE OF THE TYPE SPECIMENS OF FOSSIL INVERTEBRATES IN THE DE- PARTMENT OF GEOLOGY, UNITED STATES NATIONAL MUSEUM.

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111587. ***Abra æqualis*** (Say.). Cotype.  
Miocene. Jericho, New Jersey.

Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 80, pl. 14,  
figs. 11-15.

[This is *Amphidesma burnsi* Whitfield op. cit. p. 79, pl. 14, figs.  
16-18, and belongs to the genus *Semele*. W. H. Dall.]

=*Semele burnsi*.

See *Amphidesma burnsi*.

135700. ***Abra triangulata*** Dall. Holotype.  
Oligocene. Bowden, Jamaica.

Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 997, pl. 49, fig. 4.

38042. ***Acantherpestes inequalis*** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.

Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 424, pl. 33,  
figs. 2, 4; Foss. Insects N. America, I, 1890, p. 400, pl. 25,  
figs. 2, 4.

38038. ***Acantherpestes major*** (Meek and Worthen). Plesiotypes.  
38039. Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.

Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 150, pl. 11,  
figs. 1-4, 6-8, 11; Foss. Insects N. America, I, 1890, p. 202,  
pl. 8, figs. 1-4, 6-8, 11.



22937. **Acanthoceras ? kanabense** Stanton. Cotypes.  
Colorado (Cret.). Upper Kanab, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 181, pl. 36,  
figs. 6-8.
43411. **Acanthocladia anceps** Schlotheim. Plesiotypes and figured  
sections.  
Permian. Poesneck. Germany.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 635, pl. 56, figs. 1-1c.
43409. **Acanthoclema confluens** Ulrich. Plesiotypes.  
Keokuk (Miss.). Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 662, pl. 70, figs. 5-5b.
38844. **Acanthotelson ? magister** Packard. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Mem. Nat. Acad. Sci., III, 1886, p. 125, pl. 1, fig. 2; pl. 2,  
figs. 4, 5.
38845. **Acanthotelson stimpsoni** Meek and Worthen. Plesiotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Mem. Nat. Acad. Sci., III, 1886, p. 123, pl. 2, figs. 1-3.
8163. **Acella haldemani** White. Cotypes.  
Bear River (Cret.). Mouth of Sulphur Creek, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878, Pt. I  
(1883), p. 84, pl. 30, figs. 9a, 9b; Third Ann. Rept. U. S.  
Geol. Surv., 1883, p. 445, pl. 6, figs. 18, 19.  
See *Tortacella haldemani*.
20066. **Acella micronema** White. Cotypes.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 22, pl. 2, fig. 14.  
[*Limnæa* (*Pleurolimnæa*) *tenuicostata* Meek and Hayden. T. W.  
Stanton.]
8030. **Acervularia adjunctiva** White. Cotype.  
Lower Carboniferous. Blackfoot Range, south of Yellow-  
stone National Park.  
White, Proc. U. S. Nat. Mus., II, 1880, p. 255, pl. 1, figs. 1-3;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878, Pt. I  
(1883), p. 120, pl. 35, figs. 1a-1d.
14568. **Acervularia pentagona** (Goldfuss). Plesiotype.  
Upper Devonian. Treasure Hill, White Pine District,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 31,  
pl. 2, figs. 5, 5a.
43022. **Acidaspis callicera** Hall and Clarke. Plastotype.  
Onondaga (Dev.), Cayuga, Ontario, Canada.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 69, pl.  
16b, fig. 7.



43018. **Acidaspis romingeri** Hall and Clarke. Plastotype.  
Hamilton (Dev.). Little Traverse Bay, Michigan.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 71, pl. 16b, figs. 15-18.
107081. **Aclis acuminata** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 313, pl. 28, fig. 9.
107072. **Aclis? (Amblyspira) prominens** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 314, pl. 27, fig. 11.
9458. **Aclis? stevensoni** White. Cotypes.  
Upper Carboniferous. Coyote Creek, New Mexico.  
White, U. S. Geogr. and Geol. Surv. W. of 100th Mer., III, suppl. 1881, p. xxxv, pl. 3, figs. 9a, b.
107073. **Aclis? (Amblyspira) teres** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 314, pl. 28, fig. 6.
250. **Acmaea occidentalis** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Black Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 295, pl. 18, figs. 3a-c.
251. **Acmaea? papillata** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Fox Hills, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 296, pl. 21, figs. 4a, 4b. (On plate, Anisomyon patelliformis.)  
See Capulus fragilis.
38209. **Acridium oeningense** Scudder. Cotypes.  
Upper Miocene. Oeningen, Baden, Germany.  
Scudder, Geol. Mag., Dec. IV, II, 1895, p. 118, pl. 6, fig. 2.
12514. **Acrochordiceras hyatti** Meek. Cotypes.  
Triassic. New Pass, Desatoya Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 124, pl. 11, figs. 5, 5a.
20071. **Acroloxus actinophorus** White. Holotype.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 26, pl. 2, fig. 22.
2136. **Acroloxus minutus** (Meek and Hayden). Holotype.  
Laramie (Cret.). Three miles below Fort Union, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 543, pl. 44, fig. 10.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 451, pl. 24, fig. 27.  
See Velletia (Ancylus) minuta.



24595. **Acrothele? dichotoma** Walcott. Holotype.  
Upper Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 14, pl. 9, fig. 11.
15344. **Acrothele subsidua** (White). Plesiotypes.  
15345. Middle Cambrian. Antelope Springs, Utah, and Pioche,  
15346. Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 108, pl. 9, figs. 4-4c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 608, pl. 70, figs. 1-1c.  
See *Acrotreta? subsidua*.
35265. **Acrotreta argenta** Walcott. Cotypes.  
Upper Cambrian. Near Benders Pass, Silver Peak Range, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 580.
7867. **Acrotreta attenuata** Meek. Cotypes.  
Middle Cambrian. Above Gallatin City, east side of Gallatin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 463, in a footnote.  
[Listed as *Acrotreta subconica* Kutorga, but changed to *A. attenuata* Meek in a footnote.]  
= *Acrotreta gemma*.
35266. **Acrotreta concentrica** Walcott. Cotypes.  
Middle Cambrian. Between Dalton and Lafayette, Georgia.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 583.
35267. **Acrotreta conula** Walcott. Cotypes.  
Upper Cambrian. Oland, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 584.
35268. **Acrotreta convexa** Walcott. Cotypes.  
Upper Cambrian. Gillis Hill, Salmon River, near Marion Bridge, Cape Breton, Nova Scotia.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 584.
35269. **Acrotreta curvata** Walcott. Cotypes.  
Upper Cambrian passage beds. Hamburgh Ridge, Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 584.
35270. **Acrotreta definita** Walcott. Cotypes.  
35271. Middle Cambrian and summit of Prospect Mountain limestone. Montpelier, Idaho; Prospect Mountain, Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 584.



15343. **Acrotreta gemma** Billings. Plesiotypes.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 98, pl. 8, figs. 1-1b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 608, pl. 67, figs. 5-5e.  
= *Acrotreta primæa*.
24549. **Acrotreta gemma** Billings. Plesiotypes.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Mon., VIII, U. S. Geol. Surv., 1884, p. 17, pl. 1, figs. 1a, 1b, 1d-1f; pl. 9, figs. 9, 9a.  
See *Acrotreta attenuata*.
35216. **Acrotreta gemma** Billings. Plesiotypes.  
Flathead and Gallatin (Mid. and Up. Cambrian). Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 449, pl. 62, figs. 2, 2a-e.
35272. **Acrotreta gracia** Walcott. Cotypes.  
Middle Cambrian. Hastings Cove, Kennebecasis River, St. John County, New Brunswick.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 586.
35273. **Acrotreta idahoensis alta** Walcott. Cotypes.  
35274. Middle Cambrian. Secret and New York canyons, Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 588.
35275. **Acrotreta idahoensis sulcata** Walcott. Cotypes.  
Middle Cambrian. Near Paris, Idaho.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 588.
35276. **Acrotreta inflata** Matthew. Plesiotypes.  
Middle Cambrian. Hanford Brook, New Brunswick.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 588.
35277. **Acrotreta kutorgai** Walcott. Cotypes.  
Middle Cambrian. Coosa Valley, near Gadsden and Che-pultepec, Alabama.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 589.
35278. **Acrotreta microscopica missouriensis** Walcott. Cotypes.  
35279. Middle Cambrian. St. Francois County, and near Potosi, Missouri.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 590.
35280. **Acrotreta microscopica tetonensis** Walcott. Cotypes.  
Middle Cambrian. Divide at head of Sheep Creek, Teton Range, Wyoming.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 590.



35281. *Acrotreta ophirensis* Walcott. Cotypes.  
Middle Cambrian. Ophir City, Utah.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 591.
35282. *Acrotreta ophirensis rugosus* Walcott. Cotypes.  
Middle Cambrian. Ophir City, Utah.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 592.
35283. *Acrotreta parvula* Wallerius. Plesiotype.  
Middle Cambrian. Borgholm, Oland, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 592.
15343. *Acrotreta primaæa* Walcott. Cotypes.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 593.  
See *Acrotreta gemma*.
8570. *Acrotreta pyxidicula* White. Cotypes.  
Upper Cambrian. Schellbourne, Schell Creek Range,  
Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 9; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I 1877, p. 53, pl. 3, figs. 3a-3d.
35284. *Acrotreta sagittalis magna* Matthew. Plesiotypes.  
Middle Cambrian. Hastings Cove, Kennebecasis River,  
St. John County, New Brunswick.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 595.
35285. *Acrotreta signalis* Walcott. Cotypes.  
Middle Cambrian. St. Croix Falls, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 599.
35286. *Acrotreta socialis* v. Seebach. Plesiotypes.  
Middle Cambrian. Oland, Island of Borgholm, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 599.
8575. *Acrotreta?* *subsidua* White. Cotypes.  
15345. Middle and Lower Cambrian. Antelope Spring, House  
15346. Range, Utah.  
White, Prelim. Rept., U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 6; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 34, pl. 1, figs. 3-3d.—Walcott, Bull. No. 30,  
U. S. Geol. Surv., 1880, p. 108, pl. 9, figs. 4-4c; Tenth Ann.  
Rept. U. S. Geol. Surv., 1881, p. 68, pl. 70, figs. 1-1c.  
= *Acrothele subsidua*.
285. *Actæon Solidula attenuata* Meek and Hayden. Holotype.  
Montana. Cret. Yellowston River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 54.  
= *Actæon attenuatus*.



285. **Actæon attenuatus** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 281, pl. 19, figs.  
17a, 17b.  
See *Actæon* (*Solidula*) *attenuata*.
113860. **Actæon chipolanus** Dall. Cotypes.  
Chipola (Oligocene). One mile below Bailey's Ferry,  
Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 23; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 11.
113863. **Actæon** (*Rictaxis*) **fusulus** Dall. Cotypes.  
Chipola (Oligocene). One mile below Bailey's Ferry,  
Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 23; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 3.
20113. **Actæon inornatus** White. Cotypes.  
Chico (Cret.). Near Pence's Ranch, Butte County, Cali-  
fornia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 15, pl. 4, figs. 16-18.
113110. **Actæon myakkanus** Dall. Holotype.  
Pliocene. Myakka River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 24; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 1.
22931. **Actæon propinquus** Stanton. Cotypes.  
Colorado (Cret.). Poison Canyon, Huerfano Park,  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 161, pl. 34,  
figs. 5-8.
- 148265 to 148270. **Actæon punctocælatus coronadoensis** Stearns. Cotypes.  
Quaternary. Spanish Bight, San Diego, California.  
Stearns, Proc. U. S. Nat. Mus., XXI, 1898, p. 299.
111627. **Actæon shilohensis** Whitfield. Cotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 137, pl. 24,  
figs. 15-17.
283. **Actæon subellipticus** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Crow Creek, near Black Hills, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 63.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 280, pl. 19,  
fig. 16.
148241. **Actæon traskii** Stearns. Cotype.  
Quaternary. Spanish Bight, San Diego, California.  
Stearns, Proc. U. S. Nat. Mus., XXI, 1898, p. 297, fig. on p. 297.



8096. **Actæon woosteri** White. Cotypes.  
Fox Hills (Cret.). Confluence of the St. Vrain with  
South Platte, northern Colorado.

White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 304, pl. 7, figs. 9a-c.

8095. **Actæonina prosocheila** White. Holotype.  
Fox Hills (Cret.). Confluence of the St. Vrain with  
South Platte, northern Colorado.

White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 305, pl. 7, figs. 10a, 10b.

**Actinocrinites.** See **Actinocrinus**.

39892. **Actinocrinus agassizii** Troost. Chiotypes.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39891. **Actinocrinus cornutus** Troost. Chiotypes.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39897. **Actinocrinus fibula** Troost. Chiotypes.  
39898. Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39892. **Actinocrinus gibbosus** Troost. Chiotype.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39900. **Actinocrinus humboldti** Troost. Chiotypes.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39903. **Actinocrinus moniliformis** Miller. Chiotype.  
Mississippian. Near Clarksville, Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39902. **Actinocrinus mortoni** Troost. Chiotypes.  
Mississippian. Near Huntsville, Alabama.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.

39894. **Actinocrinus nashvillæ** Troost. Chiotypes.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.

Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.



39896. **Actinocrinus urna** Troost. Chirotype.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
8525. **Actinocrinus viaticus** White. Holotype.  
Mississippian. Mountain Spring, Old Mormon Road,  
Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 16; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. 1, 1877, p. 82, pl. 5, fig. 1.
46338. **Actinomya cancellata** (Walcott)? Plesiotypes.  
Trenton (Ord.). West Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 657, text figs. a, b.  
= *Whiteavesia cancellata*.
13881. **Actinopteria boydi** (Conrad). Plesiotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 166, pl. 5, fig. 2.
46545. **Actinostroma ? trentonense** Ulrich and Everett. Figured  
sections of holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett. Geol. Surv. Ill., VIII, 1890, p. 282, pl. 7,  
figs. 3a, 3b.
43410. **Actinotrypa peculiaris** Rominger. Plesiotypes and figured  
sections.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 503, pl. 77, figs. 3-3b.
113602. **Adeorbis leai** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 346.
113596. **Adeorbis strigillatus** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
345, pl. 19, figs. 10, 10b.
38143. **Adiphlebia lacoana** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 345, pl. 32,  
fig. 6; Foss. Insects N. America, I, 1890, pl. 18, fig. 6.
162555. **Admete gracilior** Carpenter. Plesiotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 219, pl. 7, fig. 4.



8651. **Admete** (**Admetopsis**) **gregaria** Meek. Plesiotypes.  
 Colorado (Cret.). North fork of Virgin River, Utah.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 198, pl. 18, figs. 5a, b.  
 = *Admetopsis subfusiformis*.
7894. **Admete?** (**Admetopsis**) **gregaria** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
 p. 501.  
 = *Admetopsis rhomboides*.
7893. **Admete?** (**Admetopsis**) **rhomboides** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
 p. 501.  
 = *Admetopsis rhomboides*.
7892. **Admete?** (**Admetopsis**) **subfusiformis** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
 p. 502.  
 = *Admetopsis subfusiformis*.
22925. **Admetopsis humerosa** Stanton. Cotypes.  
 Colorado (Cret.). Near Iron City, Utah.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 160, pl. 33,  
 figs. 4, 5.
7893. **Admetopsis rhomboides** (Meek). Cotypes.  
 7894. Colorado (Cret.). Coalville, Utah.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
 p. 317, pl. 9, figs. 6a, 6b.—Stanton, Bull. No. 106, U. S. Geol.  
 Surv., 1893, p. 158, pl. 33, fig. 3.  
 See *Admete?* *gregaria*, and *A.?* *rhomboides*.
7892. **Admetopsis subfusiformis** (Meek). Cotypes.  
 8651. Colorado (Cret.). Coalville, Utah.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
 p. 318, pl. 9, fig. 7a.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
 1893, p. 159, pl. 33, figs. 1, 2.  
 See *Admete* (*Admetopsis*) *gregaria*, and *A.?* *subfusi-*  
*formis*.
41372. **Æchmina abnormis** Ulrich. Holotype.  
 Rochester (Sil.). Lockport, New York.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 183,  
 pl. 12, figs. 7a, b.
41371. **Æchmina marginata** Ulrich. Holotype.  
 Hamilton (Dev.). Eighteen Mile Creek, near Buffalo,  
 New York.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 184,  
 pl. 16, fig. 5.



38147. **Aethophlebia singularis** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder Mem. Boston Soc. Nat. Hist. III, 1885, p. 338, pl. 31,  
fig. 9; Foss. Insects N. America, I, 1890, p. 302, pl. 17, fig. 9.
39889. **Agaricocrinites tuberosus** Troost. Chirotypes.  
Mississippian. White Creek Spring, Davidson County,  
Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
115407. **Agassizia clevei** Cotteau. Cotypes.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 33,  
pl. 6, figs. 2-10.
- Agassizocrinites. See Agassizocrinus.
17937. **Agassizocrinus conicus** Owen and Shumard. Plesiotype.  
Kaskaskia (Miss.). Chester, Illinois.  
Owen, Rept. Geol. Surv., Wis., Iowa, and Minn., 1852, p. 597,  
tab. v B, fig. 6.
39918. **Agassizocrinus dactyliformis** Troost. Chirotypes.  
Mississippian. Near Huntsville, Alabama.  
Troost., Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
39917. **Agassizocrinus gracilis** Troost. Chirotypes.  
Mississippian. Near Huntsville, Alabama.  
Troost., Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
27199. **Agathiceras ciscoense** Smith. Holotype.  
Upper Coal Measures. Graham, Young County, Texas.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 131, pl. 21, figs.  
17-19.
33064. **Agelacrinites hamiltonensis** Vanuxem. Plastotype.  
Hamilton (Dev.). Hamilton, Madison County, New York.  
Vanuxem, Geol. N. Y.; Rept. Third Dist., 1842, p. 158.—Hall,  
Twenty-fourth Rept. N. Y. State Mus. Nat. Hist., pl. 6, figs.  
14, 15.
40744. **Agelacrinites holbrooki** James. Plesiotype.  
Lorraine (Ord.). Morrow, Ohio.  
Clarke, Bull. No. 49, N. Y. State Museum, 1901 (1902), p. 189,  
fig. 2.  
= *Lepidodiscus holbrooki*.
7860. **Agnostus bidens** Meek. Cotypes.  
Middle Cambrian. Above Gallatin City, east side of Gal-  
latin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (18  
463, and footnote.



24638. **Agnostus bidens** Meek. Plesiotype.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 26, pl. 9, figs. 13, 13a.
35222. **Agnostus bidens** Meek. Plesiotypes.  
Flathead (Mid. Cambrian). Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 455, pl. 63, figs. 4, 4a.
24557. **Agnostus communis** Hall and Whitfield. Holotype.  
Upper Cambrian. White Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 228, pl. 1, figs. 28, 29.—Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 27.
18327. **Agnostus desideratus** Walcott. Holotype.  
Lower Cambrian. Near Salem, Washington County, New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 39; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 629, pl. 80, fig. 5.
8578. **Agnostus interstrictus** White. Cotypes.  
15405. Middle Cambrian. Antelope Spring, House Range, Utah.  
White, Prelim. Rep. Geogr. and Geol. Exped., West 100th Merid., 1874, p. 7; Rep. U. S. Geogr. Surv. West 100th Merid., IV, Pt. I, 1877, p. 38, pl. 2, figs. 5a, 5b.—Walcott, Bull. U. S. Geol. Surv., No. 30, 1886, p. 149, pl. 16, figs. 6, 6a; Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 454, pl. 63, fig. 3.
35221. **Agnostus interstrictus** White. Plesiotype.  
Flathead (Mid. Cambrian). Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, U. S. Geol. Surv., Pt. II, p. 454, pl. 63, fig. 3a.
24597. **Agnostus maladensis** Meek. Cotypes.  
Upper Cambrian. Near Malade City, Northern Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p. 464, and footnote.  
[Listed as *A. josepha* Hall?, but changed to *A. maladensis* Meek in a footnote.]
24639. **Agnostus neon** Hall and Whitfield. Holotype.  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 229, pl. 1, figs. 26, 27.
24637. **Agnostus prolongus** Hall and Whitfield. Holotype.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 230, pl. 1, figs. 30, 31.
24585. **Agnostus richmondensis** Walcott. Cotype.  
Middle Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 24, pl. 9, fig. 10.



24586. **Agnostus seclusus** Walcott. Cotype.  
Upper Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 25, pl. 9, fig. 14.
24558. **Agnostus tumidosus** Hall and Whitfield. Holotype.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 231, pl. 1, fig. 32.
35223. **Agnostus tumidosus** Hall and Whitfield. Plesiotypes.  
Flathead (Mid. Cambrian). Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 455, pl. 63, figs. 5, 5a.
24559. **Agraulos ? globosus** Walcott. Cotype.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 61, pl. 9, fig. 23.
1180. **Agraulos oweni** (Meek and Hayden). Cotypes.  
Upper Cambrian. Near head of Powder River, Big Horn Mountains, Wyoming.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 9, text figs. a-c.  
= *Ptychoparia oweni*.  
See *Arionellus* (*Crepicephalus*) *oweni*.
23839. **Agraulos redpathi** Walcott. Plastotype.  
Lower Cambrian. St. Simon, Quebec, Canada.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 654, fig. 69b on p. 655.
23863. **Agraulos saratogensis** Walcott. Cotypes.  
Upper Cambrian. Four miles west of Saratoga Springs, New York.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 276, pl. 21, fig. 14.
18334. **Agraulos strenuus** Billings. Plesiotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 653, pl. 97, figs. 1-1c.
18335. **Agraulos strenuus nasutus** Walcott. Cotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 654, pl. 97, figs. 2-2c.
23864. **Agraulos? thea** Walcott. Holotype.  
Upper Cambrian. Osceola Mills, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 277, pl. 21, fig. 15.
20134. **Aguileria cumminsi** White. Cotypes.  
Woodbine (Cret.). Four miles south of Lewisville, Den  
County, Texas.  
White, Proc. Acad. Nat. Sci. Phila., for 1887, p. 37, pl. 2, 1-3.



12331. **Akera glansoryza** Whitfield. Holotype.  
Fort Pi  re (Cret.). Cheyenne River, near French Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 437, pl. 12, fig. 25.
113384. **Alaba chipolana** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 292,  
pl. 21, fig. 9.
107128. **Alaba turrita** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 321, pl. 27, fig. 7.
158010. **Aldrichia elegans** Vaughan. Cotypes.  
Jacksonian (Eocene). Jackson, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 71, pl. 4,  
figs. 15, 16, 17a, 19.
144173. **Aligena æquata** Conrad. Plesiotypes.  
Miocene. St. Marys River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1175, pl. 24, figs. 8-8b.
162529. **Aligena cerritensis** Arnold. Holotype.  
Pleistocene. Los Cerritos, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 138, pl. 13, fig. 3.
135867. **Aligena lineata** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1176, pl. 44, fig. 23.
115110. **Aligena minor** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1177, pl. 44, fig. 8.
135868. **Aligena pustulosa** Dall. Holotype.  
Upper Oligocene. Oak Grove, Santa Rosa County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1176,  
pl. 33, figs. 18, 22.
- Allerisma. See Allorisma.
46078. **Allodesma subellipticum** (Ulrich). Holotype and plesio-  
type.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 617, pl. 42, figs. 9-14.  
See *Modiolopsis subelliptica*.



43126. **Allonema botelloides** Ulrich and Bassler. Cotypes.  
Silurian, Island of Gotland.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 281, pl. 67, figs. 2-4.
43125. **Allonema botellus** (Vine). Plesiotype.  
Silurian. Island of Gotland.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1905,  
p. 281, pl. 67, fig. 1.
43129. **Allonema fusiforme** (Nicholson and Etheridge). Plesiotype.  
Hamilton (Dev.). Alpena, Michigan.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 284, pl. 67, fig. 8.
43124. **Allonema? minimum** Ulrich and Bassler. Holotype.  
Upper Coal Measures. Springfield, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 284, pl. 67, figs. 10-12.
43131. **Allonema moniliforme aggregatum** Ulrich and Bassler. Holotype.  
Hamilton (Dev.). Genesee County, New York.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 282, pl. 67, fig. 9.
43127. **Allonema subfusiforme** Ulrich and Bassler. Holotype.  
Silurian. Island of Gotland.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 283, pl. 67, figs. 6, 7.
43128. **Allonema waldronense** Ulrich and Bassler. Holotype.  
Waldron (Sil.). Waldron, Indiana.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, p. 283,  
pl. 67, fig. 5.
46079. **Allonychia jamesi** (Meek). Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 641, pl. 48, fig. 7.
46080. **Allonychia ovata** Ulrich. Holotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 641, pl. 48, figs. 4-6.
46081. **Allonychia subrotunda** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 642, pl. 48, figs. 8, 9.
1021. **Allorisma? altirostrata** Meek and Hayden. Holotype.  
Upper Carboniferous. Juniata, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p.  
=Sedgwickia? altirostrata.



1018. *Allorisma? cooperi* (Meek and Hayden). Holotype.  
Upper Carboniferous. Near Helena, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 264.  
= *Chænomya cooperi*.  
See *Panopæa cooperi*.
6489. *Allorisma (Sedgwickia) geinitzii* Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 219,  
pl. 10, figs. 16a, 16b.
8232. *Allorisma? gilberti* White. Holotype.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 217; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1878 (1883), p.  
137, pl. 33, figs. 9a, 9b.
6761. *Allorisma (Sedgwickia) granosa* (Shumard). Holotype.  
Upper Carboniferous. Rock Bluff, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 220,  
pl. 2, figs. 8a-8b.
46758. *Allorisma (Chænomya?) hybrida* (Meek and Worthen).  
Plastotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Meek and Worthen, Geol. Surv. Ill., III, 1868, p. 538, pl. 19,  
fig. 3a.
46082. *Allorisma illinoisensis* Worthen. Plastotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Worthen, Ill. State Mus. Bull. No. 2, 1884, p. 11.
1019. *Allorisma? leavenworthana* Meek and Hayden. Cotypes.  
Upper Carboniferous. Leavenworth, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 263.  
= *Chænomya leavenworthana*.
9286. *Allorisma marionensis* White. Cotype.  
St. Louis (Miss.). Marion County, Iowa.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 31; Twelfth Ann.  
Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 167, pl. 41,  
figs. 3a, 3b.
6513. *Allorisma (Sedgwickia) reflexa* Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 217,  
pl. 10, fig. 15.
17017. *Allorisma regularis* King? Plesiotype.  
Upper Carboniferous. Wayne City, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, tab. V,  
fig. 13.  
= *Allorisma subcuneata*.



1020. **Allorisma subcuneata** Meek and Hayden. Cotypes.  
Upper Carboniferous. Leavenworth, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 263;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 37, pl. 1, figs. 10a, 10b.  
See *Allorisma regularis*.
6608. **Allorisma subcuneata** Meek and Hayden. Cotypes.  
Upper Carboniferous. Rock Bluff, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska, 1872, p. 221, pl.  
2, figs. 10a, 10b:—White, Thirteenth Ann. Rept. Geol. Surv.  
Indiana, p. 148, pl. 31, figs. 1-3.
8481. **Allorisma subcuneata** Meek and Hayden var. Plesiotype.  
Upper Carboniferous. Near Agua Azul, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 155, pl. 12, figs. 7a, 7b.
6501. **Allorisma (Sedgwickia?) subelegans** Meek. Holotype.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 220,  
pl. 10, fig. 14.
35301. **Allorisma terminale** Hall. Plesiotypes.  
Rico (Upper Carb.). Scotch Creek, Rico Quadrangle,  
Colorado.  
Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 437, pl. 9, figs.  
4, 5, 6.
15072. **Allorisma terminalis** Hall. Holotype.  
Upper Carboniferous. Big Blue River, Kansas.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 413, pl. 2, figs. 4a, 4b.
114658. **Alveinus rotundus** Dall. Cotypes.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1167, pl. 45, figs. 25, 28.
14562. **Alveolites multilamella** Meek. Cotypes.  
Upper Devonian. Argyle Hill, White Pine District,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 25,  
pl. 2, figs. 7-7b.
14554. **Alveolites vallorum** Meek. Cotypes.  
Base of Upper Devonian. Ramparts of the Mackenzie  
River, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 86, pl. 11, fig. 9.
112603. **Amalthea willcoxii** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
359, pl. 17, fig. 6.



22913. **Amauropsis bulbiformis** (Sowerby). Plesiotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 137, pl. 30,  
figs. 2-4.
268. **Amauropsis paludinæformis** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 318, pl. 19,  
figs. 15a-c.
12302. **Amauropsis paludinæformis** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Box Elder  
Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 431, pl. 12, fig. 16.
8068. **Amauropsis? utahensis** (White). Cotypes.  
Colorado (Cret.). Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 138, pl. 30, fig. 1.  
See *Lunatia utahensis* and *Euspira utahensis*.
23074. **Amberleya dilleri** Stanton. Cotypes.  
Knockville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p.  
68, pl. 12, figs. 7-9.
45083. **Ambonychia affinis** Ulrich. Cotype.  
Trenton (Ord.). Carroll County, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 402, pl. 35, figs. 5, 6.
45085. **Ambonychia amygdalina** Hall. Plesiotype.  
Trenton (Ord.). Thirteen miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 403, pl. 35, figs. 8, 9.
45084. **Ambonychia bellistriata** Hall. Plesiotype.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 402, pl. 35, figs. 1, 2.
45086. **Ambonychia planistriata** Hall. Plesiotype.  
Stones River (Ord.). Mineral Point, Wisconsin.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 401, pl. 35, figs. 3, 4.
45010. **Ambonychia superba** Billings. Plastotype.  
Anticosti St. Junction Cliff, Island of Anticosti.  
Billings, Cat. St. Foss. Anticosti, 1866, p. 49, fig. 16.



381. **Ammonites complexus** Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Great Bend of the Missouri, below  
Fort Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1875, p. 447, pl. 24,  
figs. 1a-c.  
= *Pachydiscus complexus*.
1276. **Ammonites complexus suciaensis** Meek. Cotypes.  
12396. Nanaimo (Cret.). Sucia Island, and Komooks, Vancouver  
Island.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1861, p. 317; Bull. U. S.  
Geol. and Geogr. Surv. Terr., II, No. 4, 1876, p. 369, pl. 5,  
figs. 2a-c.  
= *Pachydiscus suciaensis*.
203. **Ammonites cordiformis** Meek and Hayden. Cotypes.  
Jurassic. Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 57;  
Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV,  
1864, p. 122, pl. 5, figs. 2a-e.  
= *Cardioceras cordiforme*.
12345. **Ammonites cordiformis** Meek and Hayden. Plesiotypes.  
12294. Jurassic. Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 378, pl. 6, figs. 20-23.  
= *Cardioceras cordiforme*.
12308. **Ammonites cordiformis distans** Whitfield. Holotype.  
Jurassic. Two miles south of Belle Fourche River, near  
Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 380, pl. 6, fig. 25.  
= *Cardioceras cordiforme distans*.
384. **Ammonites halli** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Missouri River, 150 miles above  
mouth of Milk River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 70.  
= *Phylloceras? halli*.
314. **Ammonites henryi** Meek and Hayden. Holotype.  
Jurassic. Southwest part of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 57;  
Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV,  
1864, p. 123, pl. 4, figs. 9a-c.
20109. **Ammonites (Lillia) howelli** White. Cotypes.  
Jurassic. Wrangell Bay, Alaska.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 68, pl. 12, figs. 1, 2;  
pl. 14, figs. 1-3.



20086. **Ammonites (Lillia) kialagvikensis** White. Cotypes.  
Jurassic. Wrangell Bay, Alaska.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 69, pl. 13, fig. 7.
9878. **Ammonites leonensis** Conrad. Holotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 160, pl. 16, figs. 2a, 2b.  
=Schloenbachia leonensis.
8629. **Ammonites lævianus** White. Holotype.  
Colorado (Cret.). Ojo de los Cuervos, New Mexico.  
White, Rept. U. S. Geogr. Surv., W. 100th merid., IV, Pt. I, 1876,  
p. 201, pl. 19, figs. 1a, b.  
=Prionotropis lævianus.
20085. **Ammonites maclurei** White. Holotype.  
Nanaimo (Cret.). Sucia Island, Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 48, pl. 7, figs. 2, 3.
20243. **Ammonites? mandanensis** Morton. Plesiotype.  
Fox Hills (Cret.). Fox Hills between Cheyenne and  
Moreau Rivers, South Dakota.  
Owen, Rept. Geol. Surv., Wis., Iowa and Minn., 1852, pl. 7, fig. 5.  
=Scaphites mandanensis.
20244. **Ammonites moreauensis** Owen. Holotype.  
Cretaceous. Fox Hills, South Dakota.  
Owen, Rept. Geol. Surv., Wis., Iowa, and Minn., 1852, p. 579, pl. 8,  
fig. 7.  
=Scaphites cheyennensis.
1924. **Ammonites? mullananus** Meek and Hayden. Holotype.  
Fort Benton (Cret.). Chippewa Point, near Fort Benton,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1862, p. 23.—  
Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 607,  
pl. 8, figs. 1a-c.  
=Scaphites mullananus.
20242. **Ammonites nebrascensis** Owen. Cotype.  
Cretaceous. Fox Hills, South Dakota.  
Owen, Rept. Geol. Surv., Wis., Iowa, and Minn., 1852, p. 577, pl. 8,  
figs. 3, 3a.  
=Scaphites conradi.
12394. **Ammonites newberryanus** Meek. Holotype.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 47; Bull. U. S. Geol. and  
Geogr. Surv. Terr., II, No. 4, 1876, p. 367, pl. 4, figs. 3, a, b.  
=Pachydiscus newberryanus.



3582. **Ammonites pickeringi** Dana. Holotype.  
 Jurassic. At an elevation of 16,000 feet on the route to  
 Sierra de Pasco, Andes, South America.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 721, pl. 15, fig. 5.
369. **Ammonites placenta intercalaris** Meek and Hayden. Holotype.  
 Fort Pierre (Cret.). Cheyenne River at mouth of Sage  
 Creek, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 177.  
 = *Placenticerias placenta intercalare*.
9888. **Ammonites pleurisepta** Conrad. Cotypes.  
 Cretaceous. Three miles below Laredo, Texas. [Locality  
 erroneous.]  
 Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
 p. 159, pl. 15, figs. 1a-c.  
 = *Sphenodiscus pleurisepta*.
12451. **Ammonites (Scaphites?) ramosus** Meek. Holotype.  
 Nanaimo (Cret.). Nanaimo, Vancouver Island.  
 Meek, Trans. Albany Inst., IV, 1857, p. 45.  
 = *Phylloceras ? ramosum*.
7729. **Ammonites serrato-carinatus** Meek. Cotypes.  
 Colorada (Cret.). Medicine Bow River, Wyoming.  
 Meek, Proc. Am. Philos. Soc., XI, 1871, p. 429.  
 = *Prionocyclus wyomingensis*.
9893. **Ammonites texanus** Roemer. Plesiotype.  
 Washita (Lower Cret.). Near Puercos [Pecos] River,  
 Texas.  
 Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
 p. 159.  
 = *Schloenbachia leonensis*.
20121. **Ammonites turneri** White. Holotype.  
 Chico (Cret.). Cury's Canada, South of Mount Diablo,  
 California.  
 White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 26, pl. 5, figs. 1, 2.  
 = *Acanthoceras turneri*.
1342. **Ammonites vancouverensis** Meek. Holotype.  
 Nanaimo (Cret.). Komooks, Vancouver Island.  
 Meek, Proc. Acad. Nat. Sci. Phila., 1861, p. 317.  
 = *Placenticerias? vancouverense*.
224. **Ammonites vermilionensis** Meek and Hayden. Holotype.  
 Colorado (Cret.). Mouth of Vermilion River, South  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 177.  
 = *Mortoniceras? vermilionense*.



20110. **Ammonites (Amaltheus) whiteavesii** White. Cotypes.  
Jurassic. Wrangell Bay, Alaska.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 69, pl. 13, figs. 1-5.
28949. **Amnicola? cretacea** Stanton. Cotypes.  
Dakota? (Cret.). Fawn Creek, Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 633, pl. 75, fig. 8.
113565. **Amnicola floridana convexa** Pilsbry. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Pilsbry, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 338.
113567. **Amnicola omphalotropis** Pilsbry. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Pilsbry, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 339, pl. 21, fig. 13.
111588. **Amphidesma burnsi** Whitfield. Cotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 79, pl. 14, figs. 16-18.  
= *Semele burnsi*.  
See *Abra æqualis*.
158260. **Amphihelia natchitochensis** Vaughan. Cotypes.  
Lower Claiborne. Natchitoches, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 124, pl. 12, figs. 12-18.
24645. **Amphion nevadensis** Walcott. Cotypes.  
Upper Pogonip (Ord.). Bellevue Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 94, pl. 12, fig. 13.
162550. **Amphissa ventricosa** Arnold. Holotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 242, pl. 5, fig. 11.
43769. **Amplexopora affinis** Ulrich. Figured sections of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 450, pl. 36, fig. 2a.  
= *Heterotrypa affinis*.
42313. **Amplexopora ampla** Ulrich and Bassler. Cotypes and figured section.  
Lorraine (Ord.). Nashville, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 42, pl. 13, figs. 7, 8; pl. 14, fig. 3.



43641. **Amplexopora cingulata** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). McKinney's Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 254, pl. 11,  
figs. 5-5c.
43211. **Amplexopora columbiana** Ulrich and Bassler. Cotypes and  
figured sections.  
Lorraine (Ord.). Columbia, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 41, pl. 13, figs. 1-3.
43216. **Amplexopora cylindracea** Ulrich and Bassler. Cotypes and  
figured sections.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 43, pl. 13, figs. 5, 6; pl. 14, figs. 4, 5.
44070. **Amplexopora filiosa** (D'Orbigny). Plesiotypes and figured  
sections.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 41, pl. 12, figs. 10, 11.  
See *Leptotrypa filiosa*.
44069. **Amplexopora pustulosa** Ulrich. Cotypes and figured  
sections.  
Richmond (Ord.), Hanover, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 451, pl. 36, figs. 3-3e.
43640. **Amplexopora robusta** Ulrich. Holotype and figured  
sections.  
Lorraine (Ord.), Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 82, pl. 1,  
figs. 1-1b.
43815. **Amplexopora winchelli** Ulrich. Cotypes.  
Black River (Ord.), Minneapolis, Minnesota.  
Ulrich, 14th Ann. Rept. Geol. Nat. Hist. Surv. Minn., 1886, p. 91.  
= *Batostoma winchelli*.
8064. **Amplexus zaphrentiformis** White. Cotype.  
Lower Aubry (Upper Carb.), Split Mountain Canyon and  
near Echo Park, Green River, Utah.  
White, Rept. Geol. Uinta Mts. (Powell), 1876, p. 107; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terrs., 1878 (1883), Pt. I, p. 120,  
pl. 33, figs. 1a-1d.
12934. **Ampullina fischeri** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892  
pl. 22, fig. 36.



112933. *Ampullina solidula* Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 376,  
pl. 22, fig. 31.
7831. *Amussium aurarium* Meek. Holotype.  
Jurassic. Mariposa Estate, California.  
Meek, Geol. Surv. Calif., Geology, I, 1865, p. 478, pl. 1, figs. 6a.
38001. *Amynilyspes wortheni* Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 178, pl. 13,  
figs. 1-4, 9; Foss. Insects N. America, I, 1890, p. 230, pl. 10,  
figs. 1-4, 9.
112145. *Anachis avara amydra* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 136.
112144. *Anachis avara caloosaensis* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 135.
112146. *Anachis camax* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 136,  
pl. 12, fig. 3.
113258. *Anachis harrisii* Dall. Holotype.  
Miocene. Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, pl. 22,  
fig. 22.
112147. *Anachis ithitoma* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 136,  
pl. 12, fig. 6.
43218. *Anaphragma mirabile* Ulrich and Bassler. Cotypes and fig-  
ured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 40, pl. 13, figs. 9-11.
30237. *Anatina austinensis* Shattuck. Holotype.  
Buda (Low. Cret.). Shoal Creek, Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 29, pl. 18,  
figs. 1, 2.



22896. **Anatina lineata** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 117, pl. 26,  
figs. 3, 4.
28945. **Anatina (Cercomya) punctata** Stanton. Holotype and  
paratypes.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 628,  
pl. 74, fig. 5.
20091. **Anatina sulcatina** Shumard? Plesiotypes.  
Nanaimo (Cret.). Sucia Island, Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 43, pl. 6, fig. 1.
30238. **Anatina texana** Shattuck. Holotype.  
Buda (Low. Cret.). Shoal Creek, Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 30, pl. 18,  
fig. 3.
274. **Anchura (Drepanochilus) americana** (Evans and Shumard).  
Plesiotypes.  
Fort Pierre or Fox Hills (Cret.). Moreau River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1875 (1877), p. 325, pl.  
32, figs. 8a, 8b.
12429. **Anchura? fusiformis** Meek. Cotypes.  
Colorado (Cret.). Two miles from Coalville, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 160,  
pl. 15, figs. 2a.  
= *Pugnellus fusiformis*.
8648. **Anchura? fusiformis** Meek. Plesiotypes.  
Colorado (Cret.). East bank Rio Puerco, 6 miles below  
Casa Salazan, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 190, pl. 18, fig. 4a.  
= *Aporrhais prolabiata* (White)?
8054. **Anchura haydeni** White. Holotype.  
Fort Pierre (Cret.). Fifteen miles west of Greeley, Colo-  
rado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 311, pl. 7, fig. 1a.
8086. **Anchura (Drepanocheilus) mudgeana** White. Cotypes.  
Denison (Cret.). Denison, Texas.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877  
p. 312, pl. 7, figs. 3a, 3b.



288. **Anchura (Drepanochilus) nebrascensis** (Evans and Shumard). Plesiotypes.  
Fort Pierre (Cret.). Crow Creek, near Black Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 326, pl. 19, figs. 5a-c.
12309. **Anchura (Drepanocheilus) nebrascensis** (Evans and Shumard). Plesiotypes.  
Montana (Cret.). East fork of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880, p. 429, pl. 12, figs. 2, 3.
8660. **Anchura nuptialis** White. Holotype.  
Colorado (Cret.). Five miles west of Mineral Spring, Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874, p. 24.  
= *Lispodesthes nuptialis*.
284. **Anchura? parva** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 328, pl. 19, figs. 4a, 4b.  
See *Aporrhais parva*.
8069. **Anchura (Drepanocheilus) prolabiata** (White). Cotypes.  
Colorado (Cret.). Upper Kanab, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879), p. 313, pl. 7, fig. 2a.  
= *Aporrhais prolabiata*.
8078. **Anchura (Drepanocheilus) ruida** (White). Holotype.  
Colorado (Cret.). Upper Kanab, Southern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879), p. 321, pl. 7, figs. 4a, 4b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 145, pl. 31, figs. 3, 4.
276. **Anchura? sublevis** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 327, pl. 19, figs. 3a, 3b.  
See *Aporrhais sublevis*.
12344. **Anchura? sublevis** (Meek and Hayden). Plesiotypes.  
Fort Pierre (Cret.). Near Box Elder Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880, p. 428, pl. 12, fig. 6.
- Ancilla shepardi** Dall. See *Ancillaria shepardi*.



109023. **Ancillaria chipolana** Dall. Holotype.  
Oligocene. Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 41, fig. 3.
115568. **Ancillaria lamellata** Guppy. Holotype.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 579, pl. 26, fig. 9.
115567. **Ancillaria pinguis** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 434, pl. 16, fig. 3.
112093. **Ancillaria shepardi** Dall. Holotype.  
Oligocene. Hillsboro Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 46, pl. 4, fig. 4.  
[Corrected to *Ancilla*, op. cit., Pt. II, p. 225.]
470. **Ancyloceras? cheyenensis** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Mouth of Big Cheyenne River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 71.  
= *Heteroceras? cheyennense*.
12295. **Ancyloceras jenneyi** Whitfield. Cotypes.  
Fort Pierre (Cret.). East fork Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880, p. 452, pl. 16, figs. 7-9.
469. **Ancyloceras? nebrascensis** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Cheyenne River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 71.  
= *Heteroceras? nebrascense*.
12287. **Ancyloceras tricostatus** Whitfield. Holotype.  
Fort Pierre (Cret.). Cheyenne River, near French Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources, Black Hills, Dakota, 1880, p. 454, pl. 15, figs. 7, 8.
387. **Ancyloceras? uncum** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). South Fork of Cheyenne, near Black Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 409, pl. 2, figs. 1a, 1b.  
See *Ancyloceras* (*Hamites*) *uncus*.



387. **Ancyloceras (Hamites) uncus** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). South Fork of Cheyenne River, near  
Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 56.  
= *Ancyloceras uncum*.
12532. **Ancylus undulatus** Meek. Cotypes.  
Miocene. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par. IV, Pt. I, 1877, p. 186,  
pl. 17, figs. 12, a-b.--White, Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 451, pl. 32, fig. 10.
111658. **Anguinella virginiana** Conrad. Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 132, pl. 24,  
figs. 1-5.
107808. **Anisodonta americana** Dall. Holotype.  
Pliocene. Monroe County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1133, pl. 36, fig. 7.
135749. **Anisodonta (Basterotia) bowdeniana** Dall. Holotype.  
Oligocene (Bowden beds). Bowden, Jamaica.  
Dall Trans. Wagner Free Inst. Sci. Phila., III., Pt. V, 1900,  
p. 1133.
115085. **Anisodonta (Fulcrella) carolina** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1133, pl. 45, fig. 20.
247. **Anisomyon alveolus** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 292, pl. 18, figs.  
4a, 4b.  
See *Helcion alveolus*.
12278. **Anisomyon alveolus** (Meek and Hayden). Plesiotype.  
Fort Pierre (Cret.). Old Woman Fork, of Cheyenne River,  
Wyoming.  
Whitfield Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 433, pl. 12, fig. 20.
248. **Anisomyon borealis** (Morton). Plesiotypes.  
Fort Pierre (Cret.). Great Bend of Missouri below Fort  
Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 288, pl. 18,  
figs. 9a-c.  
See *Helcion carinatus*.



12254. **Anisomyon borealis** (Morton). Plesiotype.  
Fort Pierre (Cret.). Cheyenne River, Black Hills, South  
Dakota.

Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 436, pl. 12, fig. 23.

8649. **Anisomyon borealis** (Morton). Plesiotypes.  
Montana (Cret.). Gallinas Creek, New Mexico.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 193, pl. 18, figs. 9a, b.

12430. **Anisomyon centrale** Meek. Cotypes.  
Fox Hills (Cret.). Box Elder and Colorado City, Colo-  
rado.

Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 312.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
p. 303, pl. 9, figs. 1a-d

8659. **Anisomyon centrale** Meek. Plesiotype.  
Montana (Cret.). Gallinas Creek, New Mexico.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 194, pl. 18, figs. 8a, b.

246. **Anisomyon patelliformis** Meek and Hayden. Cotypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.

Meek and Hayden, Am. Journ. Sci., (2), XXIX, 1860, pp. 34, 35,  
pl. 1, figs. 1-3.—Meek, Rept. U. S. Geol. Surv. Terr., IX,  
1876, p. 290, pl. 18, figs. 5a-c, 5e, 5f.

See *Helcion patelliformis* and *Acmaea?* *papillata*.

12268. **Anisomyon patelliformis** Meek and Hayden. Plesiotypes.  
Fort Pierre (Cret.). Old Woman Fork of Cheyenne River,  
Wyoming.

Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 435, pl. 12, figs. 17, 18.

249. **Anisomyon sexsulcatus** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 293, pl. 18, figs.  
8a, 8b.

See *Helcion sexsulcatus*.

245. **Anisomyon shumardi** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
Pierre, South Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 28  
figs. 7a-c.



244. **Anisomyon subovatus** (Meek and Hayden). Holotype.  
Montana (Cret.). Yellowstone River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 291, pl. 18,  
figs. 5d, 6.  
See *Helcion subovatus*.
12298. **Anisomyon subovatus** (Meek and Hayden). Plesiotypes.  
Fort Pierre (Cret.). Old Woman Fork of Cheyenne River,  
Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 434, pl. 12, fig. 19.
43735. **Anisotrypa fistulosa** Ulrich. Figured sections of cotype.  
St. Louis (Miss.). Pella, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 448, pl. 72, figs. 6b, 6c.
43413. **Anisotrypa solida** Ulrich. Cotypes and figured sections.  
43414. Chester (Miss.). Sloans Valley, Kentucky; Chester,  
Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 449, pl. 72, figs. 9-9e.
43631. **Anisotrypa symmetrica** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 276, pl. 13,  
figs. 5-5c; Geol. Surv. Ill., VIII, 1890, p. 448, pl. 72, fig. 5.
13574. **Anodonta decurtata** Conrad. Holotype.  
Colorado (?) Eocene (?).  
Conrad, Am. Journ. Conch., VI, p. 200, pl. 11, fig. 8.—White,  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 479, pl. 29, figs.  
27, 28.
9028. **Anodonta parallela** White. Cotypes.  
Laramie (Cret.). Crow Creek, northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 62, pl. 24, fig. 3a; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 429, pl. 19, fig. 5.
13406. **Anodonta propatoris** White. Cotypes.  
Laramie (Cret.). Dog and Birch Creeks, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 61, pl. 24 figs. 2a-d; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 429, pl. 19, figs. 6-9.
13917. **Anodontopsis amygdalæformis** Walcott. Cotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 180, pl. 15, figs.  
7, 7b.
26409. **Anodontopsis ? milleri** Meek. Cotypes.  
Richmond (Ord.). Forty miles west of Cincinnati, Ohio.  
Meek, Am. Journ. Sci., (3) II, 1871, p. 297; Pal. Ohio, I, 1873,  
p. 140, pl. 12, figs. 1a, 1b, 1d.  
= *Cycloconcha milleri*.



43276. **Anolotichia impolita** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 327, pl. 28, figs. 15-20.
43275. **Anolotichia ponderosa** Ulrich. Cotype and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 473, pl. 41, figs. 3b, 3c, 3d.
135671. **Anomalocardia bowdeniana** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1304, pl. 57, fig. 7.
109242. **Anomalocardia caloosana** (Dall). Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1305.  
See Venus (*Anomalocardia*) *caloosana*.
114592. **Anomalocardia chipolana** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1304, pl. 55, fig. 1.
115169. **Anomalocardia dupliniana** Dall. Holotype.  
Upper Miocene. Natural Well, Duplin County, North  
Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1305, pl. 55, fig. 11.
140801. **Anomalocardia floridana** Conrad. Holotype.  
Oligocene. Ballast Point, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1303, pl. 55, figs. 14, 15.
35078. **Anomalocystites cornutus** Hall. Plesiotypes.  
35079. Coeymans (Dev.). Litchfield Township, Herkimer  
County, New York.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 206,  
text fig. 21; pl. 40, figs. 4, 5.
33661. **Anomalocystites** (?) **disparilis** Hall. Plesiotype.  
Oriskany (Dev.). Cumberland, Maryland.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 207,  
text fig. 22.
46087. **Anomalodonta alata** Meek. Plesiotype.  
Richmond (Ord.). Near Morrow, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 638, pl. 46, fig. 1.



46088. **Anomalodonta gigantea** Miller. Plesiotype.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 637, pl. 50, figs. 1, 2.
46089. **Anomalodonta plicata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 638, pl. 46, figs. 2, 3.
46546. **Anomaloides reticulatus** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Jour. Cincinnati Soc. Nat. Hist., I, 1878, p. 92, pl. 4, figs. 6-6b.  
= *Anomalospongia reticulata*.
46546. **Anomalospongia reticulata** (Ulrich). Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. 1, 1893, p. 69, pl. F, figs. 13-15.  
See *Anomaloides reticulatus*.
489. **Anomia concentrica** Meek. Cotypes.  
Colorado (Cret.). Sulphur Creek, Bear River, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 311; Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 359, pl. 4, fig. 3.—  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 67, pl. 8, fig. 7.
135845. **Anomia floridana** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 783, pl. 35, fig. 7.
7828. **Anomia? gryphorhynchus** Meek. Cotypes.  
Montana (Cret.). Point of Rocks, Wyoming.  
Meek, Fifth Ann. Rept. U. S. Geol. Surv. Terrs., 1872, pp. 375-376.
9050. **Anomia gryphorhynchus** Meek. Plesiotypes.  
Montana (Cret.) Two miles west of Point of Rocks, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 422, pl. 12, fig. 15.
7828. **Anomia (Placunopsis?) gryphorhynchus** Meek. Plesio types.  
Montana (Cret.). Near Point of Rocks, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terrs., 1873, p. 509.
7949. **Anomia limatula** Dall. Holotype and plesiotypes.  
154341. Pliocene. San Diego, California.  
Dall, Proc. U. S. Nat. Mus., I, 1878, p. 15; Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 785, pl. 35, fig. 19.



114824. **Anomia microgrammata** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 783, pl. 35, fig. 11.
7842. **Anomia micronema** Meek. Cotypes.  
Laramie (Cret.). Two hundred miles east of Denver,  
Colorado.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terrs., (2), I, 1875,  
p. 42.
9931. **Anomia micronema** Meek. Plesiotypes.  
12492. Laramie (Cret.). Two hundred miles east of Denver and  
15 miles north of Orchard Station, Colorado.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 97, pl. 3, fig. 3; Third  
Ann. Rept. U. S. Geol. Surv., 1883, p. 422, pl. 12, figs. 7, 9, 11.
9038. **Anomia micronema** Meek. Plesiotypes.  
Laramie (Cret.). Crow Creek and Bijou Creek, Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terrs., 1878 (1883),  
Pt. I, p. 57, pl. 25, figs. 2a-d; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 422, pl. 12, figs. 6, 8, 10.
241. **Anomia obliqua** Meek and Hayden. Holotype.  
Niobrara (Cret.). Missouri River, near mouth of Niobrara  
River, Nebraska.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 181.—  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 22, pl. 9, fig. 2.—  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 68.  
[Probably the young of *Ostrea patina*. T. W. Stanton.]
7874. **Anomia propatoris** White. Cotype.  
Montana (Cret.). Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terrs., 1878 (1883),  
Pt. I, p. 14, pl. 12, figs. 15a-15b; Third Ann. Rept. U. S.  
Geol. Surv., 1883, p. 422, pl. 5, figs. 6, 7.
22865. **Anomia propatoris** White? Plesiotypes.  
Colorado (Cret.). Muddy Creek, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 67, pl. 8, fig. 10.
8047. **Anomia rætifomis** Meek. Cotypes.  
Fox Hills (Cret.). Ridge southeast of Laporte, Colorado.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 141,  
text fig. 1.
23023. **Anomia senescens** Stanton. Holotype.  
Knoxville (Lower Cret.). Near Lowery's, Tehama  
County, California.  
Stanton, Bull. No. 133, U. Geol. Surv., 1895 (Feb., 1896), p. 35,  
pl. 2, fig. 2.
1865. **Anomia subcostata** Conrad. Holotype.  
Miocene. Carrizal Creek, Colorado Desert, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Oc  
V, 1856, p. 325, pl. 5, fig. 34.



9830. **Anomia subcostata** Conrad. Plesiotype.  
Miocene. Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2,  
1857, p. 161, pl. 19, figs. 1a, 1b.
22864. **Anomia subquadrata** Stanton. Cotypes.  
Colorado (Cret.). Williams Creek, Huerfano Park,  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 66, pl. 8, figs.  
8, 9.
346. **Anomia subtrigonalis** Meek and Hayden. Holotype and  
paratype.  
Fort Pierre (Cret.). Bijou Hill, Missouri River, Nebraska.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 181.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 22, pl. 16,  
figs. 4a, 4b.
107154. **Anomia umbonata** Guppy. Holotype.  
Upper Oligocene. Ally Creek, Naparima, Trinidad, West  
Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 325, pl. 30, fig. 6.
15426. **Anomocare? parvum** Walcott. Holotype.  
Lower Cambrian, Prospect Mountain, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 59, pl. 9, fig. 2;  
Bull. No. 30, U. S. Geol. Surv., 1886, p. 209, pl. 25, fig. 1;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 653, pl. 96, fig. 2.
46090. **Anoptera miseneri** Ulrich. Cotypes.  
46091. Richmond (Ord.). Richmond, Indiana; Clarksville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 650, pl. 50, figs. 5-9.
25542. **Anthonomus revictus** Scudder. Cotypes.  
Older Tertiary. Green River City, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 117, pl. 11, fig. 6.
25539. **Anthonomus soporus** Scudder. Plesiotype.  
Older Tertiary. Green River City, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 116, pl. 11, fig. 1.
38162. **Anthracoblattina americana** Scudder. Holotype.  
Upper Coal Measures. Near Clinton, Missouri.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 129, pl. 11,  
fig. 7.
38104. **Anthracoblattina virginiensis** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 130, pl. 11,  
fig. 8.



37984. **Anthracomartus pustulatus** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 452, pl. 40,  
figs. 5, 8; Foss. Insects N. America, 1890, p. 428, pl. 32, figs. 5, 8.
37982. **Anthracomartus trilobitus** Scudder. Cotypes.  
Upper part of Pottsville Series (Penn.). Near Fayette-  
ville, Washington County, Arkansas.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 451, pl. 39,  
figs. 7, 9; Foss. Insects N. America, 1890, p. 427, pl. 31, figs. 7,  
9.—Fritsch, Pal. Arachniden, 1904, p. 40, fig. 49.
38138. **Anthracothremma robusta** Scudder. Cotypes.  
38139. Upper Coal Measures. Mazon Creek and Braidwood,  
Illinois.  
Scudder, Mem. Bost. Soc. Nat. Hist., III, 1885, p. 327, pl. 30,  
figs. 1, 5, 6; Foss. Insects N. America, I, 1890, p. 291, pl. 16,  
figs. 1, 5, 6.
38843. **Anthrapalæmon gracilis** Meek and Worthen. Plesiotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Mem. Nat. Acad. Sci., III, 1886, p. 135, pl. 7, figs. 3, 3a,  
4, 4a, 5, 6.
41836. **Aparchites arrectus** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 646, pl. 43, figs. 35, 36.
41829. **Aparchites chatfieldensis** Ulrich. Holotype.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 646, pl. 43, figs. 37-38.
41832. **Aparchites ellipticus** Ulrich. Cotypes.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 644, pl. 43, figs. 15-17.
41834. **Aparchites fimbriatus** (Ulrich). Holotype.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 645, pl. 45, figs. 10-12.  
See *Leperditia fimbriata*.
41828. **Aparchites granilabiatus** (Ulrich). Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 644, pl. 45, figs. 21-23.  
See *Leperditia granilabiata*.



41835. **Aparchites granilabiatus neglectus** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 645.
41850. **Aparchites inornatus** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 182, pl.  
16, figs. 3a, b.
41837. **Aparchites millepunctatus** (Ulrich). Holotype.  
Stones River (Ord.). Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 645, pl. 45, figs. 16-18.  
See *Leperditia millepunctata*.
41302. **Aparchites minutissimus trentonensis** Ulrich.  
41303. Cotypes.  
Black River (Ord.). Fountain, Minnesota.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept. III Pt. II,  
1894, p. 646, pl. 43, figs. 18-20.
41811. **Aparchites oblongus** Ulrich. Holotype.  
Richmond (Ord.). Middletown, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 137, pl.  
10, figs. 10a-c.
25538. **Apion evestigatum** Scudder. Holotype.  
Older Tertiary. Roan Mountains, Western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 84, pl. 10, fig. 8.
275. **Aporrhais biangulata** (Meek and Hayden). Holotype and  
paratype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 322, pl. 19, figs.  
6a-c, and text fig. 37.  
See *Rostellaria biangulata*.
12334. **Aporrhais meeki** Whitfield. Holotype.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 426, pl. 12, fig. 5.
284. **Aporrhais parva** Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, Montana, near  
Miles City.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 178.  
= *Anchura*? parva.



22917. **Aporrhais (Perissoptera?) prolabiata** (White). Plesiotypes.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 144, pl. 31,  
fig. 2.  
See *Anchura (Drepanocheilus) prolabiata*.
276. **Aporrhais sublevis** Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 178.  
= *Anchura?* *sublevis*.
23095. **Aptychus? knoxvillensis** Stanton. Holotype.  
Knoxville (Lower Cret.). Near Knoxville, Napa County,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 83,  
pl. 18, figs. 1, 2.
148930. **Arca aquila** Heilprin. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 621, pl. 31, fig. 12.
61621. **Arca bowdeniana** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 622, pl. 33, fig. 12.
111618. **Arca (Striarca) centenaria** (Say.). Plesiotype.  
Miocene. Near Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 42, pl. 6,  
figs. 5-7.
115682. **Arca centrota** Guppy. Holotype.  
Pliocene. Matura, Trinidad.  
Guppy, Proc. Sci. Assoc. Trinidad, 1867, p. 175; Geol. Mag., Dec.  
II, I, 1874, p. 443, pl. 18, fig. 23.
430. **Arca (Cucullæa) cordata** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 86.  
= *Cucullæa (Idonearca) cordata*.
3499. **Arca devincta** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas pl. 18,  
figs. 10a.  
[Gabb unites this with *A. microdonta*.—W. H. Dall.]
12386. **Arca? equilateralis** Meek. Cotypes.  
Nanaimo (Cret.). Nanaimo?, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, 1  
pl. 2, figs. 6a.



12386. *Arca* (*Cucullæa*) *equilateralis* Meek. Cotypes.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 40.
115681. *Arca filicata* Guppy. Holotype.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 583,  
pl. 26, fig. 5.
115679. *Arca inæquilateralis* Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 293,  
pl. 18, fig. 2.
201. *Arca* (*Cucullæa*) *inornata* Meek and Hayden. Cotypes.  
Jurassic. Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 51.  
= *Grammatodon inornatus*.
153877. *Arca* (*Noëtia*) *limula* (Conrad). Plesiotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. IV, 1898, p.  
631, pl. 31, figs. 14, 14b.
153878. *Arca limula platyura* Dall. Cotypes.  
Pliocene. Alligator Creek, Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
632.
1844. *Arca microdonta* Conrad. Holotype.  
Miocene. Tulare Valley, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 323, pl. 3, fig. 29.  
See *Arca devincta*.
163473. *Arca* (*Acar*) *millifila* Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl.  
56, figs. 21, 24.
13330. *Arca obispoana* Conrad. Cotypes.  
Miocene. San Luis Obispo Valley, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 5, fig. 1.
7895. *Arca* ? *parallela* Meek. Holotype.  
Mentor (Cret.). Twelve miles southwest of Salina, Kan-  
sas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 303.  
= *Barbatia parallela*.



114786. *Arca paratina* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., II, Pt. IV, 1898, p. 621, pl. 33, fig. 14.
443. *Arca* (*Cucullæa*) *shumardi* Meek and Hayden. Holotype  
and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 86.  
= *Cucullæa* (*Ideonarca*) *shumardi*.
9846. *Arca subelongata* Conrad. Holotype.  
Lower Cretaceous. Between El Paso and Frontera, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857, p. 148, pl. 6, figs. 3a, 3b.
23044. *Arca tehamaensis* Stanton. Holotype.  
Knoxville (Lower Cret.). Five miles north of Paskenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 50, pl. 6, fig. 8.
23045. *Arca textrina* Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson, Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 50, pl. 6, figs. 6, 7.
115680. *Arca trinitaria* Guppy. Cotypes.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 583, pl. 26, fig. 3a, 3b.
148932. *Arca umbonata* Lamarck. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 620, pl. 38, figs. 4, 4a.
12398. *Arca vancouverensis* Meek. Holotype.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 40.  
= *Nemodon vancouverensis*.  
See *Grammatodon?* *vancouverensis*.
148928. *Arca wagneriana* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 619, pl. 39, figs. 6, 7.
8192. *Arcestes?* *cirratus* White. Cotypes.  
Triassic. Five miles west of John Gray's Lake, Southeastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr. Pt. I, (1883), p. 116.



12523. **Arcestes gabbi** Meek. Cotypes.  
 Triassic. Near Cottonwood Canyon, West Humboldt  
 Range, Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 121,  
 pl. 10, figs. 6a.
12531. **Arcestes? perplanus** Meek. Cotypes.  
 Upper Triassic. Buena Vista Canyon, South Fork West  
 Humboldt Range, Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 120,  
 pl. 11, figs. 7a.
27126. **Archæocaris vermiformis** Meek. Cotypes.  
 Waverly (Miss.). Near Danville, Kentucky.  
 Meek, Geol. Surv. Ohio, II, 1875, p. 321, pl. 18, fig. 7.
8235. **Archæocidaris cratis** White. Holotype.  
 Upper Carboniferous. Confluence of Green and Grand  
 rivers, Utah.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1878  
 (1883), p. 130, pl. 33, fig. 2a.
8031. **Archæocidaris dininnii** White. Cotype.  
 Upper Carboniferous. Tecumseh, Nebraska.  
 White, Proc. U. S. Nat. Mus., II, 1880, p. 260, pl. 1, figs. 13-15;  
 Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt.  
 I, p. 131, pl. 35, figs. 6a-6c.
8472. **Archæocidaris ornatus** Newberry. Plesiotype.  
 Upper Carboniferous. Ten miles west of Ojo del Oso,  
 near Fort Wingate, New Mexico.  
 White, Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. I, 1876,  
 p. 104, pl. 6, fig. 7a.
35369. **Archæocidaris ourayensis** Girty. Holotype.  
 Hermosa? (Upper Carb.). Ouray, Colorado.  
 Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 329, pl. 1, fig. 14.
9449. **Archæocidaris triplex** White. Cotypes.  
 Upper Carboniferous. Near Taos, New Mexico.  
 White, Rept. U. S. Geogr. Surv., W. 100th Merid., III, Suppl.  
 1881, p. 22, pl. 4, figs. 3a-3c.
6599. **Archæocidaris? triserrata** Meek. Cotypes.  
 Upper Carboniferous. Near Omaha, Nebraska.  
 Meek, Final Rept. U. S. Geol. Surv., Nebr. (Hayden), 1872, p.  
 151, pl. 1, figs. 6a-6c.
8471. **Archæocidaris trudifer** White. Cotypes.  
 Red Wall (Upper Carb.). Camp Apache, Navajo County,  
 Arizona.  
 White, Prelim. Rept. U. S. Geogr. Surv., W. 100th Merid., 8 vo.,  
 1874, p. 17; Rept. U. S. Geogr. Surv., W. 100th Merid., IV,  
 Pt. I, 1877, p. 104, pl. 6, figs. 8a, 8b.



14688. **Archæocyathus atlanticus** Billings. Plesiotypes.  
 15301. Lower Cambrian. L'Anse au Loup, Labrador and Silver  
 Peak, Nevada.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 73, pl. 3, figs.  
 1-2a.  
 =Spirocyathus atlanticus.
15302. **Archæocyathus billingsi** Walcott. Holotype.  
 Lower Cambrian. L'Anse au Loup, Labrador.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 74, pl. 3, figs.  
 3-3c.  
 =Coscinocyathus billingsi.
18352. **Archæocyathus (Archæocyathellus) dwighti** Walcott. Cotype.  
 Lower Cambrian. Troy, and Washington county, New  
 York.  
 Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 34; Tenth Ann. Rept.  
 U. S. Geol. Surv., 1890, p. 601, pl. 54, figs. 4, 4a.
15304. **Archæocyathus profundus** (Billings). Plesiotype.  
 Lower Cambrian. L'Anse au Loup, Labrador.  
 Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 600, pl. 52,  
 figs. 1-1c; pl. 53, figs. 1-1b; pl. 54, fig. 3.  
 See Ethmophyllum profundum.
15306. **Archæocyathus (Archæocyathellus) rarus** (Ford). Plesiotype.  
 Lower Cambrian. Troy, New York.  
 Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 601, pl. 54,  
 figs. 2, 2a.  
 See Ethmophyllum rarum.
15305. **Archæocyathus (Archæocyathellus) rensselæricus** (Ford). Plesiotypes.  
 Lower Cambrian. Troy, New York.  
 Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 600, pl. 54,  
 figs. 1-1e.  
 See Ethmophyllum rensselæricum.
43416. **Archimedes communis** Ulrich. Cotypes.  
 Chester (Miss.). Sloans Valley, Pulaski County, Ken-  
 tucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 573, pl. 63, figs. 1-1d.
43736. **Archimedes compactus** Ulrich. Cotypes.  
 Chester (Miss.). Sloans Valley, Pulaski County, Ken-  
 tucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 572, pl. 63, figs. 2, 2a.
44097. **Archimedes distans** Ulrich. C.  
 Chester (Miss.). Chester, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 578, pl. 63, figs. 9-



43740. **Archimedes invaginatus** Ulrich. Figured sections of  
cotype.

Chester (Miss.). Chester, Illinois.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 575, pl. 63, figs. 11c, 11d.

43417. **Archimedes laxus** Hall. Plesiotype.

Chester (Miss.). Litchfield, Kentucky.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 580, pl. 63, figs. 15, 15a.

See *Helicopora archimediiformis*.

43737. **Archimedes proutanus** Ulrich. Cotypes.

Chester (Miss.). Sloans Valley, Pulaski County, Kentucky.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 576, pl. 63, figs. 3-3c.

43738. **Archimedes proutanus** Ulrich var. Plesiotype.

Chester (Miss.). Sloans Valley, Pulaski County, Kentucky.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 576, pl. 63, fig. 11b.

43739. **Archimedes terebriformis** Ulrich. Cotypes.

Chester (Miss.). Sloans Valley, Pulaski County, Kentucky.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 575, pl. 63, figs. 5-5b.

38093. **Archimylacris parallela** Scudder. Holotype.

Upper Coal Measures. Campbell's Ledge, near Pittston, Pennsylvania.

Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 85, pl. 6, fig. 6;  
Foss. Insects N. America, I, 1890, p. 105, pl. 6, fig. 6.

38091. **Archimylacris paucinervis** Scudder. Holotype.

Upper Coal Measures. Mazon Creek, Grundy County, Illinois.

Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 411, pl. 31,  
fig. 5; Foss. Insects N. America, I, 1890, p. 387, pl. 23, fig. 5.

- 45686 **Archinacella cingulata** Ulrich. Holotype.

Black River (Ord.). Mercer County, Kentucky.

Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 829, pl. 61, figs. 1, 2.

45687. **Archinacella deleta** (Sardeson). Plesiotype.

Black River (Ord.). Near Cannon Falls, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 831, pl. 61, fig. 17.

45688. **Archinacella depressa** Ulrich and Scofield. Plastotype.

Stones River (Ord.). Minneapolis, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 830, pl. 61, figs. 8, 9.



45689. **Archinacella instabilis incurva** Ulrich and Scofield. Holotype.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 835, pl. 61, figs. 21-23.
45690. **Archinacella powersi** Ulrich and Scofield. Plastotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 820, fig. 1a; p. 829, figs. 3-5; pl. 61, fig. 4.
45691. **Archinacella richmondensis** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 834, pl. 61, figs. 6, 7.
45692. **Archinacella rotunda** Ulrich and Scofield. Holotype.  
Richmond (Ord.). Graf, Iowa.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 835, pl. 61, figs. 24, 25.
43693. **Archinacella rugatina** Ulrich. Holotype.  
Richmond (Ord.). Middletown, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 835, pl. 82, figs. 5, 6.
43694. **Archinacella semicarinata** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 833, pl. 61, figs. 12, 13.
45695. **Archinacella simulatrix** Ulrich and Scofield. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 833, pl. 61, figs. 10, 11.
45696. **Archinacella subrotunda** Ulrich and Scofield. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 834, pl. 61, figs. 26, 27.
37970. **Architarbus elongatus** Scudder. Holotype.  
Upper Coal Measures. Braidwood, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 449, pl. 40, fig. 4; Foss. Insects N. America, 1890, p. 425, pl. 32, fig. 4.  
= *Geraphrynus* (*Architarbus*) *elongatus*.
37993. **Archiulus** (?) *glomeratus* Scudder. Cotypes.  
37994. Upper Coal Measures. Mazon Creek and Braidwood, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 436 figs. 2, 3; Foss. Insects N. America, I, 1890, p. 412 figs. 2, 3.



191. **Arcopagella (?) macrodonta** Meek. Holotype.  
Dakota (Cret.). Big Sioux River, three miles above its  
mouth, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 202, pl. 1, fig. 2.
12411. **Arcopagella mactroides** Meek. Holotype and paratype.  
Mentor (Cret.). Twelve miles southwest of Salina,  
Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 309,  
text figs. A, B; Rept. U. S. Geol. Surv. Terr., IX, 1876, p.  
202, pl. 2, figs. 4a, 4b.
13328. **Arcopagia unda** Conrad. Holotype.  
Miocene. Shore of Santa Barbara County, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 4, figs. 3, 4.  
[May be the same as *Metis alta* (Conrad). W. H. Dall.]
24560. **Arethusina americana** Walcott. Cotype.  
Upper Cambrian. North of Dunderberg mine, Eureka  
District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 62, pl. 9, fig. 27.
42436. **Arges wesenbergensis paulianus** Clarke. Cotype.  
Trenton (Ord.). St. Paul, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 745, fig. 64.
109294. **Argyrotheca schucherti** Dall. Holotype.  
Miocene. Jackson Bluff, Ocklockonee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1539, pl. 58, fig. 8.
35230. **Arionellus levis** Walcott. Holotype.  
Middle Cambrian. Crowfoot section, Gallatin Range,  
Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 462,  
pl. 65, fig. 1.
11180. **Arionellus (Crepicephalus) oweni** Meek and Hayden. Holotype.  
Upper Cambrian. Near head of Powder River, Big Horn  
Mountains, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 436;  
Amer. Journ. Sci. (2), XXXIII, 1862, p. 74, fig. 4.  
= *Ptychoparia oweni*.  
See *Agraulos oweni*.
46002. **Aristerella nitidula** Ulrich. Cotypes.  
46003. Black River (Ord.). Chatfield and St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 524, pl. 35, figs. 30-39.



17446. **Aristozoe rotundata** Walcott. Cotype.  
Lower Cambrian. Near North Greenwich, Washington  
County, New York.  
Walcott, Amer. Journ. Sci., (3) XXXIV, 1887, p. 193, pl. 1, fig.  
9; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 627, pl. 80,  
fig. 3.
17447. **Aristozoe troyensis** (Ford). Plesiotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Amer. Journ. Sci., (3) XXXIV, 1887, p. 193, pl. 1, fig.  
8; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 628, pl. 80,  
fig. 2a.
26380. **Arthracantha punctobrachiata** Williams. Plesiotype.  
Hamilton (Dev.). Thedford, Ontario, Canada.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 81, pl.  
16, fig. 4.
43633. **Arthroclema armatum** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 194, fig.  
19, 19a-h; Geol. and Nat. Hist. Surv. Minn., Final Rept., III,  
Pt. I, 1893, p. 201, pl. 2, figs. 8-11, 25, 28-33; pl. 3, fig. 7.
43415. **Arthroclema billingsi** Ulrich. Holotype.  
Trenton (Ord.). Ottawa, Canada.  
Ulrich, Geol. Surv. Illinois, VIII, 1890, p. 642; Geol. and Nat.  
Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 197, pl. 2,  
fig. 7.
43634. **Arthroclema cornutum** Ulrich. Cotypes.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 193, figs.  
18, 18a-g. Geol. and Nat. Hist. Surv. Minn., Final Rept., III,  
Pt. I, 1893, p. 200, pl. 2, figs. 16-21, 23.
43665. **Arthroclema spiniforme** Ulrich. Cotypes.  
Stones River (Ord.). Lebanon, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 161, pl. 6,  
figs. 10, 10a.  
=Helopora spiniformis.
43498. **Arthroclema striatum** Ulrich. Cotypes.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 198, pl. 2, figs. 22, 24; pl. 3, figs. 28-33.
33068. **Arthrolycosa antiqua** Harger. Plastotype.  
Upper Coal Measures. Mazon Creek, Grundy Cot  
Illinois.  
Beecher, Amer. Journ. Sci. (3), XXXVIII, 1889, pp. 219  
figures.



43638. **Arthronema curtum** Ulrich. Holotype.  
 Lorraine (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 161, pl. 6,  
 fig. 9.  
 = *Arthrostylus curtus*.
43637. **Arthronema tenuis** (James). Plesiotypes.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 160, pl. 6,  
 figs. 8-8c.  
 = *Arthrostylus tenuis*.
43504. **Arthropora bifurcata** Ulrich. Cotypes.  
 Black River (Ord.). St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 178, pl. 14, figs. 22-25.
43502. **Arthropora reversa** Ulrich. Holotype.  
 Trenton (Ord.) St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv., Minn., Final Rept., III, Pt. I,  
 1893, p. 178, pl. 14, fig. 26.
43630. **Arthropora shafferi** (Meek). Plesiotypes.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 167, pl. 7,  
 figs. 10, 10a.
43503. **Arthropora simplex** Ulrich. Cotypes and figured sections.  
 Black River (Ord.). St. Paul and Minneapolis, Minne-  
 sota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 177, pl. 14, figs. 12-21.
43636. **Arthrostylus conjunctus** Ulrich. Holotype.  
 Stones River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 189, figs.  
 14, 14a-e; Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
 III, Pt. I, 1893, p. 188, pl. 3, figs. 13, 14.
43639. **Arthrostylus obliquus** Ulrich. Holotype.  
 Stones River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 190, figs.  
 14c-d; Geol. and Nat. Hist. Surv. Minn., Final Rept., III,  
 Pt. I, 1893, p. 188, pl. 3, figs. 15, 16.
25499. **Artipus ? receptus** Scudder. Holotype.  
 Older Tertiary. White River, Eastern Utah.  
 Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 51, pl. 9, fig. 7.
8576. **Asaphiscus wheeleri** Meek. Cotypes.  
 15460. Middle Cambrian. Near Antelope Springs, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 485,  
 (footnote).—White, Rept. U. S. Geogr. Surv. W. 100th Merid.,  
 IV, Pt. I, 1876, p. 43, pl. 2, figs. 1a-1f.—Walcott, Bull. No. 30,  
 U. S. Geol. Surv., 1886, p. 220, pl. 31, figs. 3, 3a.



25698. **Asaphus astragalotes** Green. Plastotype.  
Middle Ordovician. Greenville Canal, Canada.  
Green, Suppl. Mon. Trilobites N. America, Phila., 1835, p. 11.  
Cast No. 37.  
= *Ptychopyge astragalotes*.
24652. **Asaphus caribouensis** Walcott. Cotype.  
Upper Pogonip (Ord.). Ridge east of Hamburg Ridge,  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 98, pl. 12, figs.  
7-7b.
4963. **Asaphus caudatus** (Brünnich). Plastotype  
Niagara (Sil.). Ripley, Ohio.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 50. Cast  
No. 17.  
= *Dalmanites limulus*.  
See *Asaphus limulus* and *A. wetherilli*.
4835. **Asaphus ? crypturus** Green. Plastotype.  
Silurian. Moose River, Nova Scotia.  
Green, Suppl. Mon. Trilobites N. America, Phila., 1835, p. 18.  
Cast No. 41.  
= *Homalonotus crypturus*.
24651. **Asaphus ? curiosa** Billings. Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 98, pl. 12, fig. 15.
9824. **Asaphus emoryi** Hall. Holotype.  
Middle Ordovician. Locality not given. Probably from  
near El Paso, Texas.  
Hall, Emory's Rept. U. S. Mexican Bound. Surv., I, Pt. 2, 1857,  
p. 174, pl. 20, fig. 5.—Walcott, Palæontologia Universalis, Ser.  
I, Fasc. II, 1903, pls. 28, 28a.  
= *Isotelus emoryi*.
11600. **Asaphus (Megalaspis?) goniocercus** Meek. Holotype.  
? Upper Cambrian. Near Malade City, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 480.
17906. **Asaphus (Isotelus) iowensis** Owen. Cotypes.  
Trenton (Ord.). Otter Creek, Turkey River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 577,  
Tab. II A, figs. 1, 3, 5, 6.  
= *Isotelus iowensis*.
4880. **Asaphus laticostatus** Green. Plastotype  
Schoharie (Dev.). Ulster County, New York.  
Green, Mon. Trilobites N. America, 1832, p. 45. Cast No.  
= *Dalmanites anchiops*.



4954. **Asaphus limulurus** Green. Plastotype.  
 Niagara (Sil.). Lockport, New York.  
 Green, Mon. Trilobites N. America, 1832, p. 48. Cast No. 16.  
 = *Dalmanites limulurus*.  
 See *Asaphus caudatus* and *A. wetherilli*.
33458. **Asaphus megistos** Locke. Plesiotype.  
 Richmond (Ord.). Near Oxford, Ohio.  
 Mickelborough, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, pp.  
 200-206, text figs. 1-3.—Walcott, Science, III, March 7, 1884,  
 p. 200, fig. 1.  
 = *Isotelus maximus* Locke.
4946. **Asaphus micrurus** Green. Plastotype.  
 Helderbergian (Dev.). Trenton Falls, New York.  
 Green, Mon. Trilobites N. America, 1832, p. 56. Cast No. 19.  
 = *Dalmanites micrurus*.
4889. **Asaphus myrmecophorus** Green. Plastotype.  
 Onondaga (Dev.). Genesee County, New York.  
 Green, Suppl. Mon. Trilobites N. America, 1835, p. 16. Cast  
 No. 40.  
 = *Dalmanites (Coronura) myrmecophorus*.
4959. **Asaphus platypleurus** Green. Plastotype.  
 ? Hamilton (Dev.). Huntingdon County, Pennsylvania.  
 Green, Amer. Journ. Sci., XXXII, 1837, p. 169. Cast No. 52.
4958. **Asaphus pleuroptyx** Green. Plastotype.  
 Helderbergian (Dev.). Helderberg Mountains, New York.  
 Green, Mon. Trilobites N. America, 1832, p. 55. Cast No. 18.  
 = *Dalmanites pleuroptyx*.
25697. **Asaphus selenurus** (Eaton). Plastotype.  
 Onondaga (Dev.). Probably Ulster County, New York.  
 Green, Mon. Trilobites N. America, 1832, p. 46. Cast Nos. 14, 15.  
 = *Dalmanites (Odontocephalus) selenurus*.
1176. **Asaphus (Isotelus) susæ** (Whitfield). Plesiotype.  
 Trenton (Ord.). "Selkirk Settlement," Lower Fort Garry,  
 Manitoba, Canada.  
 Whiteaves, Paleozoic Fossils III, Pt. 3, 1897, p. 231.
4948. **Asaphus tetragonocephalus** Green. Plastotype.  
 Ordovician. New York (? Newport).  
 Green, Suppl. Mon. Trilobites N. America, 1835, p. 12. Cast  
 No. 39.



25699. **Asaphus wetherilli** Green. Plastotype.  
 Niagara (Sil.). Rochester, New York.  
 Green, Mon. Trilobites N. America, 1832, p. 57. Cast No. 20.  
 = *Dalmanites limulurus*.  
 See *Asaphus caudatus* and *A. limulurus*.
43136. **Ascodictyon floreale** Ulrich and Bassler. Holotype.  
 Hamilton (Dev.). Two miles west of Alpena, Michigan.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
 p. 288, pl. 68, fig. 13.
48143. **Ascodictyon parvulum** Ulrich and Bassler. Holotype.  
 Chester (Miss.). Jackson County, Kentucky.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
 p. 288, pl. 68, fig. 14.
43135. **Ascodictyon siluriense** Vine. Plesiotypes.  
 43138. Rochester (Sil.). Lockport, New York.  
 Waldron (Sil.). Waldron, Indiana.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
 p. 286, pl. 68, figs. 11, 12.
43142. **Ascodictyon sparsum** Ulrich and Bassler. Holotype.  
 Chester (Miss.). Claxton, Caldwell County, Kentucky.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
 p. 289, pl. 68, fig. 15.
43137. **Ascodictyon stellatum** Nicholson and Ethridge, jr. Plesiotype.  
 Hamilton (Dev.). Eighteen Mile Creek, New York.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
 p. 287, pl. 68, figs. 9, 10.
163959. **Aspella senex** Dall. Holotype.  
 Pliocene. Shell Creek, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl.  
 60, fig. 14.
43632. **Aspidopora areolata** Ulrich. Cotypes and figured sections.  
 Utica (Ord.). First Ward, Cincinnati, Ohio.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 164, pl. 7,  
 figs. 2, 2a-c.
45499. **Aspidopora elegantula** Ulrich. Cotypes.  
 Trenton (Ord.). Kenyon, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 256, pl. 17, figs. 13-21.
44051. **Aspidopora parasitica** Ulrich. Cotypes and figured sect.  
 Black River (Ord.). Fountain, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III  
 1893, p. 255, pl. 17, figs. 26-32.



109280. **Astarte (Goodallia ?) americana** Dall. Holotype.  
 Claiborne (Eocene). Claiborne, Alabama.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
 p. 1496, pl. 56, fig. 5
162527. **Astarte (Crassinella) branneri** Arnold. Holotype.  
 Pleistocene. Los Cerritos, California.  
 Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 127, pl. 18, fig. 12.
23053. **Astarte californica** Stanton. Cotypes.  
 Knoxville (Lower Cret.). Near Stephenson, Tehama  
 County, California.  
 Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 57,  
 pl. 6, figs. 19-21.
23052. **Astarte corrugata** Stanton. Cotypes.  
 Knoxville (Lower Cret.). Five miles north of Paskenta,  
 California.  
 Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 56,  
 pl. 6, fig. 16.
111600. **Astarte distans** Conrad. Plesiotype.  
 Miocene. Shiloh, New Jersey.  
 Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 53, pl. 7,  
 figs. 13-17,
3418. **Astarte (distans var. ?) floridana** Dall. Holotype.  
 Miocene. Alum Bluff, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., II. Pt. VI, 1903,  
 p. 1493, pl. 57, fig. 19.
12343. **Astarte evansi** (Hall and Meek). Plesiotypes.  
 Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
 Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 413, pl. 11, fig. 13.
199. **Astarte fragilis** Meek and Hayden. Cotypes.  
 Jurassic. Southwest base of Black Hills, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 183;  
 Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
 1864, p. 94.
3593. **Astarte gemma** Dana. Holotype.  
 Carboniferous. Wollongong Point, district of Illawarra,  
 New South Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 688, Atlas, pl. 3,  
 figs. 4a, 4b.
109313. **Astarte glenni** Dall. Holotype.  
 Miocene. Darlington District, South Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
 p. 1490.



332. **Astarte gregaria** Meek and Hayden. Holotype and para-  
types.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
p. 84.  
= *Eriphyla gregaria*.
202. **Astarte inornata** Meek and Hayden. Holotype.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 183;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 94, pl. 3, figs. 12a, 12b.
28936. **Astarte meeki** Stanton. Cotypes.  
28937. Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 620,  
pl. 73, figs. 3-5.
135062. **Astarte opulentora** Dall. Holotype.  
Pliocene. Tehuantepec Railway, 70 kilometers west of  
Atlantic terminus.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1494, pl. 57, fig. 11.
8361. **Astarte packardi** White. Plastotype.  
Jurassic. Como Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 149, pl. 37, figs. 6a, 6b.
145978. **Astarte (Ashtarotha) parma** Dall. Holotype.  
Older Miocene. Skipton, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1493, pl. 57, fig. 22.
109314. **Astarte protracta** (Meyer). Plesiotype.  
Claiborne (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
pl. 43, fig. 3.  
= *Lirodiscus protractus*.
9829. **Astarte texana** Conrad. Holotype.  
Cretaceous. Western Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 152, pl. 5, fig. 9.
23054. **Astarte trapezoidalis** Stanton. Holotype and paratypes.  
23104. Knoxville (Lower Cret.). Three miles south of Low-  
reys, Tehama County, and near Reiff, Lake Co  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896)  
pl. 6, figs. 17, 18.



146121. **Astarte undulata vaginulata** Dall. Cotypes.  
 Miocene. Grove Wharf, James River, Virginia.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
 p. 1491.
135849. **Astarte wagneri** Dall. Holotype.  
 Oligocene. Oak Grove, Santa Rosa County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
 p. 1488, pl. 57, fig. 20.
9383. **Astartella gurleyi** White. Holotype.  
 Upper Carboniferous. Danville, Illinois.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
 Pt. I, p. 166, pl. 42, figs. 6a, 6b.
3591. **Astartila ? corpulenta** Dana. Holotype.  
 Carboniferous. District of Illawarra, New South Wales,  
 Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 691, Atlas, pl. 3,  
 figs. 3a-c.
3592. **Astartila cyclas** Dana. Cotypes.  
 Carboniferous. Wollongong Point, Illawarra, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 690, Atlas, pl. 4,  
 figs. 3, 3a-e.
3588. **Astartila cyprina** Dana. Cotypes.  
 3677. Carboniferous. Wollongong Point, Illawarra, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 689, Atlas, pl. 3,  
 figs. 6-6f, 7a, 7b.
3586. **Astartila cytherea** Dana. Cotypes.  
 Carboniferous. Wollongong Point, Illawarra, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 689, Atlas, pl. 4,  
 figs. 1, 1a-g.
3594. **Astartila intrepida** Dana. Holotype.  
 Carboniferous. Wollongong Point, Illawarra, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 689, Atlas, pl. 3,  
 figs. 5, 5a-c.
3589. **Astartila polita** Dana. Cotypes.  
 Carboniferous. Black Head, Illawarra, New South Wales,  
 Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 690, Atlas, pl. 4,  
 figs. 2, 2a-c.
3598. **Astartila transversa** Dana. Holotype.  
 Carboniferous. Wollongong Point, Illawarra, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 690, Atlas, pl. 4,  
 figs. 4-4d.



39914. **Asterias antiqua** Troost. Chirotype.  
Ordovician. Harpeth River, Davidson County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 59.
12325. **Asterias? dubium** Whitfield. Cotype.  
Jurassic. East side Spearfish Creek, near Junction with  
the Redwater, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources, Black Hills, Dakota, 1880,  
p. 344, pl. 3, fig. 3.—Clark, Bull. No. 97, U. S. Geol. Surv.,  
1893, p. 31, pl. 5, fig. 2.
112994. **Astralium (Lithopoma) chipolanum** Dall. Cotypes.  
Oligocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
384, pl. 18, fig. 6a.
112993. **Astralium (Lithopoma) precursor** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
384, pl. 18, fig. 8.
158281. **Astrangia expansa** Vaughan. Cotypes.  
158285. Jacksonian (Eocene). Jackson, Mississippi, and Mont-  
gomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 133, pl. 14,  
figs. 3-5.
158289. **Astrangia harrisi** Vaughan. Cotypes.  
158290. Jacksonian (Eocene). Near Vines Bluff, Saline River,  
Cleveland County, Arkansas.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 136, pl. 14,  
figs. 8, 9.
158288. **Astrangia ludoviciana** Vaughan. Paratype.  
Jacksonian (Eocene). Montgomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 135, pl. 14,  
fig. 7.
158291. **Astrangia wilcoxensis** Vaughan. Holotype.  
Midway (Eocene). Eastern Wilcox County, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 137, pl. 14,  
figs. 11, 11a.
39913. **Astrios tennesseæ** Troost. Chirotype.  
Mississippian. Cannon County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 59.  
[A siliceous geode probably after some *Agaricocrinus*.]
158315. **Astrocœnia pumpellyi** Vaughan. Holotype.  
Upper Oligocene. Russell's Spring, Flint River, Decatur  
County, Georgia.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 149, pl. 17,  
figs. 7, 7a.



13337. **Astrodapsis antiselli** Conrad. Cotypes.  
Miocene. Estrella, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific Ocean, VII, 1857, p. 196, pl. 10, figs. 1, 2.
158229. **Astrohelia burnsi** Vaughan. Cotypes.  
Jacksonian (Eocene). Jackson, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 115, pl. 10, figs. 3-3b.
158223. **Astrohelia neglecta** Vaughan. Cotypes.  
Red Bluff (Oligocene). Red Bluff, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 114, pl. 9, figs. 14, 15.
46547. **Astylospongia praemorsa pusilla** ? Hall. Plesiotypes.  
Waldron (Sil.). Waldron, Indiana.  
Rauff, Palaeontographica, XL, 1894, p. 309.
107387. **Astyris perfervida** Dall. Holotype.  
Oligocene. Oak Grove, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 41, fig. 10.
130350. **Astyris turgidula** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 40, fig. 12b.
23869. **Asymptoceras newloni** Hyatt. Holotype.  
Upper Carboniferous. Oswego, Kansas.  
Hyatt, Second Ann. Rept. Geol. Surv., Texas, 1891, p. 346, text figs. 48, 49.
43193. **Atactopora angularis** Ulrich and Bassler. Holotype and figured sections.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 32, pl. 8, figs. 10-12.
43619. **Atactopora hirsuta** Ulrich. Holotype and figured sections.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 120, pl. 12, figs. 3-3b.—Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 31, pl. 8, fig. 14.
43620. **Atactopora maculata** Ulrich. Holotype and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 121, pl. 12, figs. 2-2c.—Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 31, pl. 8, fig. 13.
43626. **Atactopora multigranosa** Ulrich. Holotype.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 122, pl. 12, figs. 5-8.  
= *Atactoporella multigranosa*.



43623. **Atactopora mundula** Ulrich. Holotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 123, pl. 12, figs. 4, 4a.  
= *Atactoporella mundula*.
43621. **Atactopora septosa** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 125, pl. 12, figs. 7-7c.  
= *Amplexopora septosa*.
43663. **Atactopora subramosa** Ulrich. Holotype.  
Richmond (Ord.). Jacksonburg, Butler County, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 124, pl. 12, figs. 6-6c.  
= *Heterotrypa subramosa*.
43624. **Atactopora tenella** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XI, 1879, p. 123, pl. 12, figs. 5, 5a.  
= *Atactoporella tenella*.
43501. **Atactoporella crassa** Ulrich. Holotype and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 225, pl. 15, figs. 18-21.
43805. **Atactoporella insueta** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 224, pl. 18, figs. 5-8.
43626. **Atactoporella multigranosa** (Ulrich). Figured sections of holotype.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 254, pl. 12, figs. 8, 8a.  
See *Atactopora multigranosa*.
43734. **Atactoporella mundula** (Ulrich). Figured section of plesiotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 252, pl. 12, figs. 6, 6a.  
See *Atactopora mundula*.
43627. **Atactoporella newportensis** Ulrich. Cotypes and figured sections.  
Utica (Ord.). Newport, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 250, pl. 12, figs. 4-4b.



43629. *Atactoporella orton* (Nicholson).                      Figured section of  
plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 256, pl. 12,  
figs. 7, 7a.
43500. *Atactoporella ramosa* Ulrich. Cotypes and figured sections.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 226, pl. 20, figs. 22-27.
43628. *Atactoporella schucherti* Ulrich.                      Figured sections of  
holotype.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 251, pl. 12,  
figs. 5-5b.
43625. *Atactoporella typicalis* Ulrich. Cotypes and figured sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 248, pl. 12,  
figs. 3-3d.
43806. *Atactoporella typicalis præcipita* Ulrich.                      Cotypes and  
43872.                      figured sections.  
Black River (Ord.). St. Paul and Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 223, pl. 15, figs. 16, 17; pl. 18, figs. 1-4.
14233. *Athyris claytoni* Hall and Whitfield.                      Cotypes.  
? Waverly (Miss.). Little Cottonwood, Wahsatch Range,  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt.  
II, 1877, p. 256, pl. 4, figs. 15-17.  
= *Seminula claytoni*.
8826. *Athyris coloradoensis* Girty.                      Cotypes.  
14441. Ouray (Upper Dev.). Ouray limestone at many localities  
33950 in Central Colorado.  
to Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 46,  
33955. pl. 5, figs. 5-11.
14339. *Athyris hirsuta* Hall.                      Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 222, pl. 18, fig. 5.  
= *Cliothis hirsuta*.
35196. *Athyris lamellosa* (L'Eveillé).                      Plesiotype.  
Madison (Miss.). Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 561, pl. 71,  
fig. 7a.



14476. *Athyris* ? *persinuata* Meek. Cotypes.  
Upper Carboniferous. White Pine Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 81,  
pl. 9, figs. 4-4b.  
=*Seminula persinuata*.
14234. *Athyris planosulcata* Phillips.? Plesiotypes.  
15240. Waverly? (Miss.). Cottonwood Divide, Wahsatch Range,  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 257, pl. 4, figs. 10, 11.
14475. *Athyris roissy* (L'Eveillé)? Plesiotypes.  
Upper Carboniferous. Ruby Valley Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 82,  
pl. 9, figs. 3-3b.  
[The surface of these shells is not spinose as it should be for this  
species, but is somewhat lamellose. It is probably a new species of  
*Seminula*.]
14338. *Athyris roissy* (L'Eveillé). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 280, pl. 18, figs.  
9, 9a.  
=*Cliothyris roissy*.
14232. *Athyris subquadrata* Hall? Plesiotypes.  
Lower Carboniferous. Snowstorm Hill, near Dry Canyon,  
Oquirrh Mts., Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 271, pl. 5, figs. 19, 20.  
=*Seminula subquadrata*.
14472. *Athyris subtilita* Hall. Plesiotypes.  
Upper Carboniferous. White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 83,  
pl. 8, figs. 6, 6a.  
=*Seminula argentea*.
6610. *Athyris subtilita* Hall. Plesiotypes.  
6801. Upper Carboniferous. Rock Bluffs and Plattsmouth,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), p. 180,  
pl. 1, fig. 12; pl. 5, fig. 9.  
=*Seminula argentea*.
647. *Athyris subtilita* Hall. Plesiotypes.  
Upper Carboniferous. Near Humboldt Mountains, Ne  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876,  
pl. 2, figs. 4a, 4b.



33956. **Athyris vittata** Hall var. Plesiotype.  
Ouray (Upper Dev.). Engineer Mountain, Colorado.  
Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 47,  
pl. 5, fig. 12.
34127. **Athyris vittata triplicata** Girty. Holotype.  
Three Forks (Dev.). Soda Butte Creek, Yellowstone  
National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 504, pl. 66,  
figs. 4a, 4b, 4c.
23075. **Atresius liratus** Gabb. Plesiotypes.  
Knoxville (Lower Cret.). One mile northwest of Palmer's  
Ranch, Lake County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p.  
68, pl. 11, fig. 6.
135834. **Atrina (argentea var.?) chipolana** Dall. Cotypes.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 662.
145988. **Atrina harrisii** Dall. Holotype.  
Miocene. Jones Wharf, Patuxent River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 663,  
pl. 29, fig. 11.
137831. **Atrina jacksoniana** Dall. Cotypes.  
136645. Eocene. Garlands Creek, Clarke County, and Jackson,  
Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 662.
- Atrypa (n. s.?) Owen, 1852 = Pentamerella dubia Hall.**
1166. **Atrypa aspera** (Schlotheim). Plesiotypes.  
Base of Upper Devonian. Anderson River, Mackenzie  
River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci. I, 1868, p. 96, pl. 13, fig. 12.
633. **Atrypa aspera** (Schlotheim). Plesiotypes.  
Upper Devonian. Neils Valley, east of Eureka, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 348,  
pl. 1, figs. 2-2b.
17928. **Atrypa comis** Owen. Holotype.  
Middle Devonian. Near Davenport, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 583,  
tab. III A, fig. 4.  
= *Gypidula comis*.
13848. **Atrypa desquamata** Sowerby. Plesiotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 150, pl. 14, figs.  
4, 4a.  
= *Atrypa missouriensis*.  
See *Atrypa reticularis* Meek, 1877.



14019. **Atrypa missouriensis** Miller. Plesiotypes.  
 13848. Three Forks (Dev.). Lone Mountain and Piñon Station,  
 Nevada.  
 Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 502, pl.  
 66, figs. 2a-c.  
 See *Atrypa desquamata* Walcott, and *A. reticularis*  
 Meek (partim.).
1165. **Atrypa reticularis** (Linnæus). Plesiotypes.  
 Base of Upper Devonian. Anderson River, Mackenzie  
 River Basin, Canada.  
 Meek, Trans. Chicago Acad. Sci., I, 1868, p. 97, pl. 13, figs. 13a,  
 13b.
631. **Atrypa reticularis** (Linnæus). Plesiotypes.  
 14019. Upper Devonian. West side of Buell Valley, east of  
 Eureka, and Treasure Hill, White Pine District,  
 Nevada.  
 Meek, Rept. Expl. Great Basin Utah, Simpson, 1876, p. 347, pl.  
 1, figs. 6-6b; Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I,  
 1877, p. 38, pl. 1, figs. 7-7a.  
 = *Atrypa missouriensis*.  
 See *Atrypa desquamata*.
13845. **Atrypa reticularis** (Linnæus). Plesiotypes.  
 14019. Three Forks (Dev.). Eureka and White Pine Districts,  
 Nevada.  
 Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 502, pl.  
 66, figs. 1a, 1b, 1c.
13845. **Atrypa reticularis** (Linnæus). Plesiotype.  
 Middle and Upper Devonian. Eureka District, Nevada.  
 Walcott, Mon, VIII, U. S. Geol. Surv., 1884, p. 150, pl. 14, figs.  
 6-6b.
113892. **Atys (Acrostemma) gracilis** Dall. Cotypes.  
 Oligocene. Calhoun County, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 29; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 15.
61563. **Atys obscurata** Dall. Cotypes.  
 113893. Oligocene and Miocene. Alum Bluff, Florida, and Bowden,  
 Jamaica, British West Indies.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 30; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 4.
113889. **Atys œdemata** Dall. Cotypes.  
 Chipola (Oligocene). Chipola River, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 28; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 21.
106971. **Atys (Acrostemma) salina** Dall. Holotype.  
 Lisbon (Eocene). Head of Saline Bayou, St. Maurice.  
 Winn Parish, Louisiana.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 29; Trans. W  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 14.



30198. **Aucella aviculæformis** Hyatt. Cotypes.  
 Jurassic. Near Reynolds Ferry, six miles from Copperopolis, California.  
 Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 433.
30199. **Aucella aviculæformis acuta** Hyatt. Cotypes.  
 Jurassic. Near Reynolds Ferry, six miles from Copperopolis, California.  
 Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 433.
21663. **Aucella concentrica** Keyserling. Plesiotypes.  
 Knoxville (Lower Cret.). Near Knoxville, California.  
 White, Mon. XIII, U. S. Geol. Surv., 1889, p. 232, pl. 4, figs. 18, 19, 20.  
 = *Aucella piochii*.
21663. **Aucella concentrica** Keyserling. Plesiotypes.  
 Knoxville (Lower Cret.). Near Knoxville, California.  
 White, Mon. XIII, U. S. Geol. Surv., 1889, p. 232, pl. 4, figs. 16, 17.  
 = *Aucella crassicollis*.
21660. **Aucella concentrica** Fischer. Plesiotypes.  
 Knoxville (Lower Cret.). State of Washington.  
 White, Mon. XIII, U. S. Geol. Surv., 1889, p. 232, pl. 4, fig. 21.  
 = *Aucella crassicollis*.
12360. **Aucella concentrica** Fischer (variety). Plesiotype.  
 Lower Cretaceous? Fossil Point, Port Möller, Alaska.  
 White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 13, pl. 6, figs. 2-12;  
 Mon. XIII, U. S. Geol. Surv., 1889, p. 232, pl. 4, figs. 11-15.  
 = *Aucella crassicollis*.
21663. **Aucella crassicollis** Keyserling. Plesiotypes.  
 23034 Knoxville (Lower Cret.). Between Elder Creek and  
 to Paskenta, and near Stephenson, Tehama County,  
 23039. California.  
 Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 45, pl. 5, figs. 1-13; pl. 6, figs. 2-5.  
 See *Aucella concentrica*, 12360, 21660, 21663.
30196. **Aucella elongata** Hyatt. Cotypes.  
 30197. Jurassic. Stanislaus River, opposite Bostwick's bar, California.  
 Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 431.
30195. **Aucella elongata orbicularis** Hyatt. Holotype.  
 Jurassic. Bostwick's bar, Stanislaus River, California.  
 Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 432.



7831. *Aucella erringtoni* Gabb. Plesiotypes.  
Jurassic. Mariposa Estate, California.  
Meek, Geol. Surv. Calif., Geology, I, 1865, p. 479, pl. 1, figs. 2a [5e].
30200. *Aucella erringtoni arcuata* Hyatt. Cotypes.  
Jurassic. Tuolumne River, at Moffat's bridge, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 430.
30194. *Aucella orbicularis* Hyatt. Cotypes.  
Jurassic. Calaveras County, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 434.
12660. *Aucella pallasii* Keyserling. Plesiotypes.  
Jurassic. Near Moscow, Russia.  
White, Mon. XIII, U. S. Geol. Surv., 1889, p. 231, pl. 3, figs. 10, 11.  
= *Aucella mosquensis*.
21659. *Aucella pallasii* var. Keyserling. Plesiotypes.  
Jurassic. Near Moscow, Russia.  
White, Mon. XIII, U. S. Geol. Surv., 1889, p. 231, pl. 3, figs. 12, 13.  
= *Aucella mosquensis*.
- 23030 to 23032. *Aucella piochii* (Gabb). Plesiotypes.  
Knoxville (Lower Cret.). South Fork of Elder Creek,  
Tehama County, and near Knoxville and Paskenta,  
21663. California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 42,  
pl. 4, figs. 2-10.  
See *Aucella concentrica*, 21663.
23033. *Aucella piochii ovata* Stanton. Cotypes.  
Knoxville (Lower Cret.). South Fork of Elder Creek,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 43,  
pl. 4, figs. 11-14.
25543. *Aulobaris anicilla* Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 137, pl. 12, fig. 1.
25545. *Aulobaris circumscripta* Scudder. Cotypes.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 137, pl. 12, fig. 5.
25544. *Aulobaris comminuta* Scudder. Cotype.  
Older Tertiary. White River, eastern Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 138, pl. 12, f



14544. **Aulophyllum? richardsoni** Meek. Cotypes.  
 Base of Upper Devonian. Ramparts of the Mackenzie  
 River, Canada.  
 Meek. Trans. Chicago Acad. Sci., I, 1868, p. 81, pl. 11, figs. 3, 3a.  
 = *Cyathophyllum richardsoni*.
14976. **Aulopora annectens** Clarke. Holotype.  
 Naples (Dev.). Whale's Back, Canandaigua Lake, New  
 York.  
 Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 63, pl. 3, fig. 15.
35162. **Aulopora geometrica** Girty. Holotype.  
 Madison (Miss.). Bighorn Pass, Gallatin Range, Yellow-  
 stone National Park.  
 Girty, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 508, pl.  
 67, fig. 6a.
22334. **Auricula neumayri** White. Cotypes.  
 Bear River (Cret.). Twenty miles north of Cokeville,  
 Wyoming.  
 White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 41, pl. 5, fig. 1.
291. **Avalana subglobosa** Meek and Hayden. Holotype.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
 = *Cinulia (Oligoptycha) concinna*.
18333. **Avalonia manuelensis** Walcott. Holotype.  
 Lower Cambrian. Conception Bay, Newfoundland.  
 Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 44; Tenth Ann.  
 Rept. U. S. Geol. Surv., 1890, p. 646, pl. 95, figs. 3, 3a.
33553. **Avicula bellula** Hall. Plastotype.  
 Coeymans (Dev.). Albany County, New York.  
 Hall, Nat. Hist. N. Y., Pal. III, 1859, p. 289, pl. 53, fig. 8.  
 = *Aviculopecten bellula*.
15073. **Avicula? custa** Hall. Cotypes.  
 Upper Carboniferous. La Bonté, Laramie County, Wyo-  
 ming.  
 Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake,  
 Utah, 1852, p. 412, pl. 2, figs. 1a, b.
460. **Avicula? fibrosa** Meek and Hayden. Holotype and paratypes.  
 Fort Pierre (Cret.). Forks of Cheyenne River, South  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 86.  
 See *Pteria (Pseudopteria) fibrosa*.



22866. **Avicula gastroides** Meek. Plesiotypes.  
Colorado (Cret.). Poison Canyon and William's Creek,  
Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 72, pl. 9, figs.  
7-10.  
See *Pteria* (*Oxytoma*) *erecta*, and *P.* (*O.?*) *gastroides*.
7789. **Avicula** (*Oxytoma*?) **gastroides** Meek. Holotype.  
Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p. 491.  
See *Pteria* (*Oxytoma*?) *gastroides*.
46094. **Avicula hermione** Billings. Plastotype.  
Trenton (Ord.). Montreal, Canada.  
Billings, Paleozoic Fossils, Geol. Surv. Canada, 1865 (Advance  
Sheet, 1862), p. 40, fig. 42.
6514. **Avicula longa** (Geinitz). Plesiotypes.  
Upper Carb. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv., Nebr. (Hayden), 1872, p.  
199, pl. 9, fig. 8.
1893. **Avicula mucronata** Meek and Hayden. Cotypes.  
Jurassic. Wind River Valley, Wyoming.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to  
Knowl., No. 172, XIV, 1864, p. 81.  
= *Avicula wyomingensis*.  
See *Pteria munsteri*.
12342. **Avicula** (*Oxytoma*) **mucronata** Meek and Hayden. Cotypes.  
Jurassic. Two miles south of Belle Fourche River, near  
Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880,  
p. 357, pl. 4, figs. 1, 2.  
= *Avicula* (*Oxytoma*) *wyomingensis*.  
See *Pteria munsteri*.
7788. **Avicula** (*Pseudoptera*) **propleura** Meek. Cotypes.  
7790. Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 489.  
= *Gervillia propleura*.
7888. **Avicula** (*Pseudoptera*) **rhytophora** Meek. Cotypes.  
7790. Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 490.  
= *Gervillia propleura*.



461. *Avicula subgibbosa* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 180.  
= *Avicula linguiformis subgibbosa*.
205. *Avicula (Monotis) tenuicostata* Meek and Hayden. Cotypes.  
Jurassic. Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 50.  
= *Eumicrotis curta*.
3660. *Avicula volgensis* Verneuil? Plesiotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 704, Atlas pl. 9,  
fig. 4.
23029. *Avicula (Oxytoma) whiteavesi* Stanton. Holotype.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 38,  
pl. 4, fig. 1.
14353. *Aviculopecten affinis* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 229, pl. 19,  
figs. 1, 1a.
8189. *Aviculopecten? altus* White. Holotype.  
Triassic. Twenty miles west of John Gray's Lake, South-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terrs., Pt. I, 1878  
(1883), p. 110, pl. 32, fig. 3a.
12547. *Aviculopecten (Eumicrotis?) augustensis* Hall and Whit-  
field. Holotype.  
Jurassic. Shoshone Springs, Augusta Mountains, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 288, pl. 7, fig. 15.
14179. *Aviculopecten catactus* Meek. Cotypes.  
Lower Carboniferous. White Pine Mountains, near  
Hamilton, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 93,  
pl. 3, figs. 10, 10a, (? 10b).
6508. *Aviculopecten carboniferous* (Stevens). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. 1872, p. 193, pl. 4, fig.  
8; pl. 9, figs. 4a, 4b.—White, Thirteenth Ann. Rept. Geol.  
Surv. Indiana, 1884, p. 144, pl. 28, figs. 5, 6.



8522. **Aviculopecten coreyanus** White. Cotypes.  
Upper Carboniferous. East of Mt. Taylor, near Pajuate,  
New Mexico.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 21; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 147, pl. 11, figs. 1a, 1b.
6947. **Aviculopecten coxanus** Meek and Worthen. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p.  
196, pl. 9, figs. 2a, 2b.
15217. **Aviculopecten curtocardinalis** Hall and Whitfield. Cotypes.  
Either Permian or Triassic. Southeast of Salt Lake City,  
Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 273, pl. 6, fig. 4.
14354. **Aviculopecten eurekensis** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 227, pl. 19, figs. 2, 3.
14355. **Aviculopecten haguei** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 226 pl. 19, fig. 4.
8187. **Aviculopecten ? idahoensis** Meek. Plesiotypes.  
Triassic. Five miles west of John Gray's Lake, South-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 110, pl. 32, fig. 2a.
8187. **Aviculopecten (Pseudomonotis ?) idahoensis** Meek. Holotype.  
Triassic. Lincoln Valley, near Fort Hall, Idaho.  
Meek, Fifth Ann. Rept. U. S. Geol. Surv. Terr., 1872, p. 374.
8520. **Aviculopecten ? interlineatus** Meek and Worthen. Plesiotype.  
Upper Carboniferous. Confluence of White Mountain and  
Black rivers, Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 149, pl. 11, fig. 3a.
35298. **Aviculopecten ? interlineatus** Meek and Worthen. Plesiotype.  
Maroon (Upper Carb.). Ouray, Colorado.  
Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 416, pl. 8, fig. 3.
2521. **Aviculopecten maccoyi** Meek and Hayden. Holotype.  
Permian. South Cottonwood Creek, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to ~~Kn~~  
No. 172, XIV, 1864, p. 50, pl. 2, fig. 9.



8484. **Aviculopecten maccoyi** Meek and Hayden. Plesiotype.  
Upper Carboniferous. Near Bear Spring, Camp Wingate,  
New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 149, pl. 11, fig. 2a.
6502. **Aviculopecten neglectus** (Geinitz). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 193,  
pl. 9, fig. 1b.  
= *Euchondria neglecta*.
46368. **Aviculopecten oblongus** Meek and Worthen. Plastotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Meek and Worthen, Geol. Surv. Ill., II, 1866, p. 258, pl. 18,  
figs. 3a, b.
15215. **Aviculopecten occidaneus** Meek. Cotypes.  
Upper Carboniferous. Weber Canyon, Wahsatch Range,  
Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 96,  
pl. 12, figs. 13-13b.
21716. **Aviculopecten occidentalis** (Shumard). Plesiotype.  
Permian. Military crossing of the Big Wichita, Baylor  
County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 29, pl. 4, fig. 1.
24536. **Aviculopecten occidentalis** (Shumard). Plesiotypes.  
Upper Carboniferous. Fort Apache, Navajo County, Ari-  
zona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 146, pl. 12, figs. 8a, 8b.
35299. **Aviculopecten occidentalis** Shumard. Plesiotype.  
Rico (Upper Carb.). Silver Creek, Rico Quadrangle,  
Colorado.  
Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 414, pl. 8, fig. 1.
15218. **Aviculopecten parvulus** Hall and Whitfield. Cotypes.  
Either Permian or Triassic. Southeast of Salt Lake City,  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 274, pl. 6, fig. 6.
8188. **Aviculopecten ? pealei** White. Holotype.  
Triassic. Five miles west of John Gray's Lake, South-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 109, pl. 32, fig. 4a.
14356. **Aviculopecten peroccidens** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 227, pl. 8, fig. 8.



14357. **Aviculopecten pintöensis** Walcott. Cotype.  
Lower Carboniferous. Near Pinto Peak, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 228, pl. 8, fig. 6.
8173. **Aviculopecten ? superstrictus** White. Holotype.  
Jurassic?. Head of Lincoln Valley.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 144, pl. 37, figs. 4a, 4b.
651. **Aviculopecten utahensis** Meek. Cotype.  
Upper Carboniferous. Summit Spring Pass, east of Eureka,  
Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 354,  
pl. 1, fig. 9a.  
See *Pecten utahensis*.
15210. **Aviculopecten weberensis** Hall and Whitfield. Holotype.  
Either Permian or Triassic. Southeast of Salt Lake City,  
Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 273, pl. 6, fig. 5.
6983. **Aviculopecten whitei** Meek. Cotypes.  
Upper Carboniferous. Morton's Shaft, Nebraska City,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 195,  
pl. 4, figs. 11a-c.
7458. **Aviculopecten ? williamsi** Meek. Cotypes.  
Chouteau (Miss.). Chouteau Springs, Boone County,  
Missouri.  
Meek, Proc. Acad. Nat. Sci. Phila., 1871, p. 178.
6507. **Aviculopinna americana** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 197,  
pl. 9, figs. 12a-d.
35300. **Aviculopinna nebraskensis** Beede. Plesiotypes.  
Rico (Upper Carb.). Scotch Creek, Rico Quadrangle,  
Colorado.  
Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 435, pl. 9, figs. 1, 2.
- Axinæa*. See *Axinea*.
13358. **Axinea barbarensis** Conrad. Holotype.  
Miocene. Ranch Triumpho, Los Angeles, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 194, pl. 6, fig. 3.
9005. **Axinea holmesiana** White. Cot.  
Montana (Cret.). Point of Rocks, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1  
Pt. I, p. 59, pl. 20, figs. 2a, 2b.  
=*Pectunculus holmesianus*.



111617. **Axinea lentiformis** (Conrad)? Plesiotype.  
 Miocene. Shiloh, New Jersey.  
 Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 49, pl. 7,  
 figs. 5, 6.
7935. **Axinea profunda** Dall. Cotypes.  
 Pliocene. San Diego, California.  
 Dall, Proc. U. S. Nat. Mus., I, 1878, p. 13.
309. **Axinea subimbricata** (Meek and Hayden). Cotypes.  
 Fox Hills (Cret.). Heart River, North Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 95, pl. 28,  
 figs. 14b-d.  
 See *Pectunculus subimbricatus*.
8045. **Axinea wyomingensis** Meek. Holotype.  
 Montana (Cret.). Cooper Creek, Laramie Plains, Wyoming.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 149,  
 text figs. 2, 3 on p. 150.  
 = *Pectunculus wyomingensis*.
- 3960 **Axinus (Schizodus) ovatus** Meek and Hayden. Holotype.  
 Permian. Cottonwood Creek, Kansas.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 262.  
 = *Schizodus ovatus*.
43404. **Bactropora simplex** Ulrich. Cotypes and figured sections.  
 43405. Keokuk (Miss.). Warsaw and Nauvoo, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 663, pl. 70, figs. 14-14b;  
 pl. 71, figs. 6-6a.
1934. **Baculites anceps obtusus** Meek. Cotypes.  
 Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 406, text figs.  
 57-60.
178. **Baculites asper** Morton? Plesiotype.  
 Fox Hills (Cret.). Mouth of Judith River, Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 404, pl. 39,  
 figs. 10a, 10d.
22936. **Baculites asper** Morton? Plesiotypes.  
 Colorado (Cret.). Cinnabar Mountain, Montana.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 167, pl. 36,  
 figs. 4, 5.
1916. **Baculites baculus** Meek and Hayden. Holotype.  
 Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 445.—  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 397, text  
 figs. 51, 52.  
 = *Baculites ovatus baculus*.



376. **Baculites compressus** Say. Plesiotypes.  
to Fort Pierre (Cret.). Cheyenne River and White River,  
378. South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 400, pl. 20,  
figs. 3a-c.
22935. **Baculites gracilis** Shumard? Plesiotypes.  
Colorado (Cret.). Near Paria and Upper Kanab, Utah,  
and Turkey Creek, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 166, pl. 36,  
figs. 1-3.  
See *Baculites ovatus*, 8631.
380. **Baculites grandis** Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Black Hills,  
South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 398, pl. 33,  
figs. 1a-c.
1363. **Baculites occidentalis** Meek. Cotypes.  
Nanaimo (Cret.). Komooks, eastern shore of Vancouver  
Island.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1861, p. 316; Bull. U. S.  
Geol. and Geogr. Surv. Terrs., II, No. 4, 1876, p. 366, pl. 4,  
figs. 1, 1a, 1b.  
See *Baculites ovatus*, 1363.
374. **Baculites ovatus** Say. Plesiotypes.  
463. Fort Pierre (Cret.). Great Bend of Missouri below Fort  
Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 394, pl. 20, figs.  
1a, 1b, 2a-c.
1363. **Baculites ovatus** Say? Plesiotypes.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 48.  
= *Baculites occidentalis*.
8631. **Baculites ovatus** Say. Plesiotypes.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 199, pl. 19, figs. 4b, c.  
= *Baculites gracilis*?
8630. **Baculites ovatus** Say. Plesiotypes.  
Montana (Cret.). Gallinas Creek, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 200, pl. 19, figs. 4a, 5a-c.
41789. **Bairdia cestriensis** Ulrich. Cotypes.  
Chester (Miss.). Grayson Springs Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 210, pl.  
17, figs. 6a-c, 7a, b.



41788. **Bairdia leguminoides** Ulrich. Holotype.  
Hamilton (Dev.). Eighteen Mile Creek, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 197, pl. 17, figs. 5a-c.
3959. **Bakevella parva** Meek and Hayden. Holotype.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 78; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 57, pl. 2, figs. 12a, 12b.
8476. **Bakevella parva** Meek and Hayden. Plesiotypes.  
Upper Carboniferous. Bear Spring, Camp Wingate, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 153, pl. 11, figs. 7a, 7b.
38117. **Balaninus femoratus** Scudder. Cotypes.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 143, pl. 12, fig. 6.
39920. **Balanocrinites sculptus** Troost. Chiotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
158368. **Balanophyllia augustinensis** Vaughan. Paratypes.  
Lower Claibornian. San Augustine, Texas.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 174.
158367. **Balanophyllia anularis** Vaughan. Holotype.  
Bell's Landing (Eocene). Lower Peach Tree Landing, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 174, pl. 20, figs. 3-5.
158378. **Balanophyllia caulifera** (Conrad). Plesiotypes.  
158379. Vicksburgian (Oligocene). Vicksburg, Mississippi, and Rosefield, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 176, pl. 20, figs. 16, 16a, 18.
158382. **Balanophyllia caulifera multigranosa** Vaughan. Cotypes.  
Red Bluff (Oligocene). Red Bluff, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 177, pl. 20, figs. 19, 20.
- 158328 **Balanophyllia desmophyllum** Milne-Edwards and Haime. Plesiotypes.  
to Gregg's and Bell's Landings (Eocene). Gregg's and  
158331. Bell's Landings, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 164, pl. 18, figs. 11-13a.



158347. **Balanophyllia desmophyllum microcostata** Vaughan.  
 158348. Cotypes.  
 Nanafalia (Eocene). Nanafalia Bluff, Alabama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 166, pl. 19,  
 figs. 1-3c.
158369. **Balanophyllia elongata** Vaughan. Cotypes.  
 Red Bluff (Oligocene). Red Bluff, Mississippi.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 175, pl. 20,  
 figs. 11-14.
158389. **Balanophyllia haleana** (Milne-Edwards and Haime).  
 158390. Plesiotypes.  
 Woods Bluff (Eocene). Clarke County, Alabama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 178, pl. 20,  
 figs. 22, 23,
158362. **Balanophyllia inauris** Vaughan. Cotype.  
 Shark River = ? Claibornian (Eocene). Near Squankum,  
 New Jersey.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 171, pl. 19,  
 fig. 12.
158364. **Balanophyllia ponderosa** Vaughan. Cotype.  
 Midway (Eocene). Prairie Creek, Wilcox County, Ala-  
 bama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 173, pl. 20,  
 figs. 1, 2.
13316. **Balanus estrellanus** Conrad. Holotype.  
 13342. Miocene. Estrella, California.  
 Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
 VII, 1857, p. 195, pl. 8, fig. 1.
116004. **Barbatia (Cucullaria) aldrichi** Dall. Holotype.  
 Claibornian (Eocene). Claiborne, Alabama.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
 p. 630, pl. 32, fig. 19.
107718. **Barbatia (Calloarca) arcua** (Heilprin). Plesiotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
 p. 624, pl. 33, fig. 4.
8071. **Barbatia barbulata** White. Cotypes.  
 Fox Hills (Cret.). Cimarron, New Mexico.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
 Pt. I, p. 19, pl. 11, fig. 5a.
8067. **Barbatia coalvillensis** White. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
 p. 286, pl. 6, figs. 2a, 2b.  
 = *Barbatia micronema*.



107719. **Barbatia (Calloarca) irregularis** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 623, pl. 33, fig. 5.
111618. **Barbatia marylandica** (Conrad). Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 48, pl. 7,  
figs. 2, 3.
7846. **Barbatia micronema** (Meek). Holotype and plesiotypes.  
22870. Colorado (Cret.). Bear River City, Wyoming; Coalville,  
22871. Utah, and Denton County, Texas.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 89, pl. 21,  
figs. 1-4.  
See *Barbatia coalvillensis* and *Trapezium micronema*.
135761. **Barbatia (Fossularca?) ovalina** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 630, pl. 32, fig. 18.
7895. **Barbatia (Polynema?) parallela** (Meek). Holotype.  
Mentor (Cret.). Twelve miles west of Salina, Kansas.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 80, pl. 2, fig. 10.  
See *Arca?* *parallela*.
135831. **Barbatia (Calloarca) phalacra** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 626, pl. 33, fig. 3.
148966. **Barbatia (Cucullaria) tæniata** Dall. Cotypes.  
Pliocene. Shell Creek, Desoto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
631, pl. 25, figs. 1, 1a.
153716. **Barbatia (Granoarca) virginiaë** Wagner. Plesiotypes.  
Miocene. Simmons Bluff, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
627, pl. 32, fig. 23.
8048. **Baroda subelliptica** White. Cotypes.  
Fox Hills (Cret.). Mouth of the St. Vrain, Northern  
Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terrs., 1877 (1879),  
p. 294, pl. 10, figs. 4a-d.
1939. **Baroda wyomingensis** (Meek). Holotype.  
Fox Hills (Cret.). Mouth of Deer Creek, on North  
Platte, Wyoming.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terrs., 1877 (1879),  
p. 293, pl. 10, figs. 3a, 3b.  
See *Tapes wyomingensis*.



24650. **Barrandia ? mccoysi** Walcott. Cotype.  
Upper Pogonip. (Ord.). Ridge east of Hamburg Ridge,  
Eureka district, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 96, pl. 12, fig. 5.
30243. **Barroisiceras hyatti** Shattuck. Holotype.  
Buda (Low. Cret.). Shoal Creek, Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 36, pl. 25,  
figs. 3, 4.
30242. **Barroisiceras texanum** Shattuck. Holotype.  
Buda (Low. Cret.). Little Bear Creek, Hays County,  
Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 35, pl. 25,  
figs. 1, 2.
41821. **Barychilina pulchella** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 199, pl.  
13, figs. 4a-c.
41819. **Barychilina punctostriata** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 199, pl.  
13, figs. 1a-e, 2a-c.
41820. **Barychilina punctostriata curta** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 199, pl.  
13, figs. 3a-c.
15409. **Bathynotus holopyga** (Hall). Plesiotype.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 191, pl. 31, figs.  
1, 1a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 646, pl.  
95, figs. 1, 1a.
11595. **Bathyurellus (Asaphiscus) bradleyi** Meek. Cotypes.  
Middle Cambrian. Near Malade City, Northern Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p. 484.  
= *Asaphiscus bradleyi*.
15457. **Bathyuriscus howelli** Walcott. Cotype.  
Middle Cambrian. Chisholm Mine, Ely Mountains, near  
Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 216, pl. 30, fig. 2.
15455. **Bathyuriscus productus** (Hall and Whitfield). Cotypes and  
15456. plesiotype.  
15458. Middle Cambrian. Below Argenta, Big Cottonwood Can-  
yon, City Creek, Wahsatch Mountains, and East Can-  
yon, Oquirrh Mountains, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, pl. 217, pl. 30, fig.  
1-1h.  
= *Ogygia producta* (partim).



24654. **Bathyurus ? congeneris** Walcott. Cotype.  
Upper Pogonip (Ord.). Ridge southwest of Wood Cove,  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 92, pl. 12, fig. 8  
(?8a).
7863. **Bathyurus ? (Bathyuriscus) haydeni** Meek. Holotype.  
Middle Cambrian. Above Gallatin City, east side of Gal-  
latin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 482.  
= *Bathyuriscus haydeni*.
24655. **Bathyurus pogonipensis** Hall and Whitfield. Holotype.  
Lower Pogonip (Ord.). Pogonip Mountain, Eureka Dis-  
trict, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 243, pl. 1, figs. 33, 34.
43052. **Bathyurus schucherti** Clarke. Cotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 724, fig. 42.
7865. **Bathyurus serratus** Meek. Cotypes.  
Middle Cambrian. Above Gallatin City, east side Galla-  
tin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terrs., 1872 (1873),  
p. 480.
24653. **Bathyurus ? simillimus** Walcott. Holotype.  
Upper Pogonip (Ord.). White Mountain, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 93, pl. 12, fig. 11.
41932. **Bathyurus spiniger** (Hall). Plesiotype.  
41933. Stones River (Ord.). High Bridge, Kentucky; Dunleith,  
Illinois.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 723, figs. 38, 39.
24654. **Bathyurus ? tuberculatus** Walcott. Cotype.  
Upper Pogonip (Ord.). Ridge southwest of Wood Cove,  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 91, pl. 12, fig. 9.
20097. **Batissa dubia** White. Cotypes.  
Puget (Cret.?). Newcastle and Wilkeson, Washington.  
White, Bull. No. 51, U. S. Geol. Surv. 1889, p. 61, pl. 11, figs. 1, 2.
20108. **Batissa newberryi** White. Cotypes.  
Puget (Cret.?). Carbonado, Wilkeson, and Newcastle,  
Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 60, pl. 9, figs.  
1-3.



43511. **Batostoma? decipiens** Ulrich. Holotype and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 298, pl. 27, figs. 16-19.
43505. **Batostoma fertile** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 290, pl. 25, figs. 1-11.
43506. **Batostoma fertile circulare** Ulrich. Holotype and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 291, pl. 25, figs. 5, 6, 8, 9.
43509. **Batostoma humile** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 294, pl. 25, figs. 29-36.
44061. **Batostoma imperfectum** Ulrich. Figured sections of cotypes.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 460, pl. 35, figs. 3a-3d.  
= *Hemiphragma imperfectum*.
43508. **Batostoma magnoporum** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 291, pl. 25, figs. 12-15.
43250. **Batostoma manitobense** Ulrich. Figured section of cotypes.  
Richmond (Ord.). Stony Mountain, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal. Cambro-Sil., Pt. II, 1889, p. 33, pl. 9, figs. 3-3c.
43507. **Batostoma minnesotense** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul and Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 297, pl. 26, figs. 38-40; pl. 27, figs. 9-15.
43512. **Batostoma montuosum** Ulrich. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 293, pl. 26, figs. 26-28.
43820. **Batostoma variabile** Ulrich. Cotypes and figured sections.  
44062. Richmond (Ord.). Osgood, Indiana; Clarksville, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 460, pl. 35, figs. 4b-4e, 5; pl. 36, fig. 1.



43510. **Batostoma varium** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 292, pl. 25, figs. 16-25.
43815. **Batostoma winchelli** (Ulrich). Cotypes and figured sections.  
Black River (Ord.). St. Paul and Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 295, pl. 26, figs. 33-37; pl. 27, figs. 1-6.  
See *Amplexopora winchelli*.
43741. **Batostomella abrupta** Ulrich. Cotype and figured sections.  
Chester (Miss.). Sloans Valley, Pulaski County, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 435, pl. 75, figs. 2a-2e.
43408. **Batostomella gracilis** (Nicholson). Figured sections of  
plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 434, pl. 35, fig. 2.  
= *Bythopora gracilis*.
43742. **Batostomella interstincta** Ulrich. Figured sections of cotype.  
St. Louis (Miss.). Pella, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 434, pl. 75, figs. 4d, 4e.
43743. **Batostomella nitidula** Ulrich. Figured section of cotype.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 436, pl. 75, fig. 3b.
43406. **Batostomella obliqua** Ulrich. Cotypes and figured sections.  
Traverse (Dev.). Alpena, Michigan.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 433, pl. 46, figs. 2-2c.  
= *Eridotrypa obliqua*.
43744. **Batostomella simulatrix** Ulrich. Cotypes and figured  
sections.  
Richmond (Ord.). Clarksville, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 432, pl. 35, figs. 1, 1a, 1b,  
1d-1g.  
= *Eridotrypa simulatrix*.
43407. **Batostomella spinulosa** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Pulaski County, Ken-  
tucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 434, pl. 75, figs. 1-1f.
8079. **Beaumontia? solitaria** White. Cotypes.  
Fox Hills (Cret.). Six miles south of Fort Collins,  
Colorado.  
White, Bull. U. S. Geol. and Geogr. Surv. Terr., Vol. V, 1879,  
p. 221; Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878,  
(1883), Pt. I, p. 8, pl. 12, figs. 13a-13c.  
[Based on fragments of a rudistid shell. T. W. Stanton.]



41816. **Beecherella cristata** Ulrich. Holotype.  
New Scotland (Dev.). Albany County, New York.  
Ulrich, Amer. Geol., VIII, 1891, p. 202, pl. 2, figs. 16-19.
41817. **Beecherella subtumida** Ulrich. Holotype.  
New Scotland (Dev.). Albany County, New York.  
Ulrich, Amer. Geol., VIII, 1891, p. 200, pl. 2, figs. 5-7.
41818. **Beecherella subtumida intermedia** Ulrich. Holotype.  
New Scotland (Dev.). Albany County, New York.  
Ulrich, Amer. Geol., VIII, 1891, p. 201, pl. 2, fig. 15.
162551. **Bela sanctæ-monicæ** Arnold. Holotype.  
Pleistocene. Port Los Angeles, near Santa Monica, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 210, pl. 8, fig. 14.
412. **Belemnitella bulbosa** Meek and Hayden. Paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 70.—Meek, Rept. U. S. Geological Surv. Terr., IX, 1876, p. 504, pl. 33, figs. 2c-e.
195. **Belemnites densus** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 58; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 126, pl. 4, fig. 10c.; pl. 5, figs. 1b-d, f-i.
12293. **Belemnites densus** Meek and Hayden. Plesiotypes.  
Jurassic. Beaver Creek, and east of the Belle Fourche River, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills, Dakota, 1880, p. 381, pl. 6, figs. 15-19.
23096. **Belemnites impressus** Gabb. Plesiotypes.  
23097. Knoxville (Lower Cret.). Tehama County, and near Ono, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 84, pl. 20, figs. 1-5.
12361. **Belemnites macritatis** White. Cotypes.  
Lower Cretaceous?. Fossil Point, Port Möller, Alaska.  
White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 14, pl. 6, figs. 13, 14.
12515. **Belemnites nevadensis** Meek. Cotypes.  
12517. Jurassic. Cottonwood Canyon and American District, West Humboldt Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 138, pl. 12, figs. 7, a, b; 8, a, b.
30207. **Belemnites pacificus** Gabb. Plesiotypes.  
to Jurassic. Mariposa County, and American Canyon, 1  
30209. Greenwood, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 427.



23098. **Belemnites tehamaensis** Stanton. Holotype.  
Knoxville (Lower Cret.). South Fork of Elder Creek,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 84,  
pl. 19, figs. 1-3.
46577. **Belemnospongia fascicularis** Ulrich. Cotype.  
Burlington (Miss.). Burlington, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 248, pl. 3, fig. 2b.
38860. **Belinurus lacoei** Packard. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Amer. Nat., XIX, 1885, p. 292; Mem. Nat. Acad. Sci.,  
III, 1886, p. 149, pl. 5, fig. 5.  
[Probably the same as *Prestwichia danæ*. Probably a sexual dif-  
ference.]
8564. **Bellerophon allegoricus** White. Cotypes.  
Middle Ordovician. Fish Spring, House Range, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8vo,  
1874, p. 10; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. 1, 1877, p. 55, pl. 3, figs. 6a-6c.
45697. **Bellerophon bilineatus** Ulrich. Holotype.  
Trenton (Ord.). Near Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 917, pl. 64, figs. 19-21.
9209. **Bellerophon bowmani** White. Holotype.  
Hamilton (Dev.). Andalusia, Illinois.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 32.
45698. **Bellerophon capax** Ulrich. Cotypes.  
45699. Lorraine (Ord.). Covington, Kentucky; Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 921, pl. 63, figs. 50, 51; pl. 64, figs. 40-43.
6506. **Bellerophon carbonarius** Cox. Plesiotypes.  
6548. Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p.  
224, pl. 4, fig. 16; pl. 11, figs. 11a-c.  
= *Euphemus carbonarius*.
45700. **Bellerophon clausus** Ulrich. Cotypes.  
45701. Trenton (Ord.). Frankfort, Kentucky; Middle Tennes-  
see.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 916, pl. 64, figs. 7-10.
13955. **Bellerophon combsi** Walcott. Cotype.  
Middle Devonian. Combs Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 193, pl. 17, figs.  
9-9b.



24346. **Bellerophon coutinhoanus** Hartt and Rathbun. Cotype.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 117.  
= *Bucaniella coutinhoana*.
8489. **Bellerophon crassus** Meek and Worthen. Plesiotype.  
Upper Carboniferous. Camp Cottonwood, near Spring  
Mountain, Nevada.  
White, U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1877, p. 157,  
pl. 12, fig. 1a.
14985. **Bellerophon incisus** Clarke. Holotype.  
Naples (Dev.). Parrish Gully, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 53.
8924. **Bellerophon inspeciosus** White. Cotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.,  
1881, p. 30, pl. 4, figs. 1a-1d.  
= *Bellerophon* (*Euphemus*) *inspeciosus*.
45719. **Bellerophon lindsleyi** Safford. Holotype.  
Trenton (Ord.). Dekalb County, Tennessee.  
Safford, Geol. Tenn., 1869, pl. G, figs. 3a, b, d, e.  
= *Bucania lindsleyi*.
14420. **Bellerophon majusculus** Walcott. Cotypes.  
Lower Carboniferous. Near Pinto Peak, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 256, pl. 23, figs.  
1, 1a; pl. 24, fig. 6.
6521. **Bellerophon marcouianus** Geinitz. Plesiotypes.  
6986. Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 226,  
pl. 4, fig. 17; pl. 11, fig. 13a.  
= *Bucanopsis marcouiana*.
3622. **Bellerophon micromphalus** Morris. Plesiotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 708, Atlas, pl. 10,  
figs. 6a, 6b.
45702. **Bellerophon mohri** Miller. Plesiotypes.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final <sup>1</sup>  
III, Pt. II, 1897, p. 920, pl. 64, figs. 44, 45.



6512. **Bellerophon montfortianus** Norwood and Pratten. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 225,  
pl. 11, fig. 15.  
= *Patellostium montfortianus*.
21702. **Bellerophon montfortianus** Norwood and Pratten. Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 26, pl. 3, figs.  
15, 16.  
= *Patellostium montfortianus*.
24345. **Bellerophon morganianus** Hartt and Rathbun. Cotypes.  
Middle Devonian Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 117.
24345. **Bellerophon morganianus** Hartt and Rathbun. Plesiotypes.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 34, pl. 3, figs.  
1-3.
14013. **Bellerophon neleus** Hall and Whitfield. Cotypes.  
Upper Devonian. Treasure Hill, White Pine District,  
Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 250, pl. 3, figs. 18-20.
6518. **Bellerophon percarinatus** Conrad. Plesiotype.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 227,  
pl. 11, fig. 14.
13954. **Bellerophon perplexa** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 193, pl. 17, figs.  
6-6b.
45703. **Bellerophon platystoma** Meek and Worthen. Plesiotypes.  
45704. Trenton (Ord.). Cannon Falls, Minnesota; Dixon, Illi-  
nois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 918, pl. 64, figs. 22-25.
45705. **Bellerophon recurvus** Ulrich. Cotypes.  
Lorraine (Ord.) Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 920, pl. 64, figs. 11-13.
45706. **Bellerophon similis** Ulrich and Scofield. Cotypes.  
45707. Trenton (Ord.). Wykoff and one and a half miles south  
of Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 919, pl. 64, figs. 31-39.



24318. **Bellerophon steltzneri** Clarke. Holotype.  
Middle Devonian. Rio Curua, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 34, pl. 3,  
figs. 5, 6.
3623. **Bellerophon strictus** Dana. Holotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 707, Atlas pl. 10,  
figs. 5-5b.
45708. **Bellerophon subangularis** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 920, pl. 64, figs. 14-16.
45709. **Bellerophon subglobulus** Ulrich. Holotype.  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 917, pl. 64, figs. 17, 18.
8234. **Bellerophon subpapillosus** White. Cotypes.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv., Terr., 1879, p. 218; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1878, Pt. I (1883), p. 138,  
pl. 34, fig. 3a.  
=Euphemus subpapillosus.
14421. **Bellerophon textilis** Hall? Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 257, pl. 18, fig. 18.
45710. **Bellerophon troosti** (D'Orbigny) Safford. Plesiotypes.  
45711. Trenton (Ord.). Nashville, Tennessee; near Danville,  
Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 915, pl. 64, figs. 1-5.
45712. **Bellerophon troosti burginensis** Ulrich. Holotype.  
Trenton (Ord.). Three miles north of Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 916, pl. 64, fig. 6.
3624. **Bellerophon undulatus** Dana. Holotype.  
Carboniferous. Harper's Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 707, Atlas pl. 10,  
figs. 4-4b.
33789. **Beltina danai** Walcott. Cotype.  
33790. Greyson (Algonkian). Near Glenwood and Nei  
Montana.  
Walcott, Bull. No. 10, Geol. Soc. Amer., 1899, p. 239, pl. 25,  
1-18; pl. 26, figs. 1-8; pl. 27, figs. 2-6.



45713. **Bembexia sulcomarginata** (Conrad). Plesiotype.  
Hamilton (Dev.). Delphi Falls, New York.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1001, fig. 6.
107077. **Benthonella turbinata** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 321, pl. 27, fig. 10.
43269. **Berenicea minnesotensis** Ulrich. Cotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 120, pl. 1, figs. 25, 29; pl. 2, fig. 1.
43268. **Berenicea primitiva** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 157, pl. 6, fig. 4.
43267. **Berenicea vesiculosa** Ulrich. Holotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 158, pl. 6, fig. 5.
41666. **Beyrichia initialis** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 658, pl. 43, figs. 82, 83.
41381. **Beyrichia** (? **Drepanella**) **kalmadini** (Jones). Plesiotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 190, pl. 14, figs. 1a-c.
41380. **Beyrichia lyoni** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 190, pl. 14, figs. 2a-c, 3.
14006. **Beyrichia** (**Primitia**) **occidentalis** Walcott. Cotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 204, pl. 17, figs. 4, 4a.
41434. **Beyrichia** (? **Primitia**) **parallela** (Ulrich). Plesiotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 125, pl. 10, figs. 15a-d.
41524. **Beyrichia persulcata** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 12, pl. 7, fig. 6.  
**=*Bollia persulcata*.**



41692. **Beyrichia radiata cestriensis** Ulrich. Holotype.  
Chester (Miss.). Near Grayson Springs, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII. 1890, p. 204, pl.  
14, figs. 4a, 4b.
41696. **Beyrichia simulatrix** Ulrich. Holotype.  
Chester (Miss.). Near Grayson Springs, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII. 1890, p. 205, pl.  
18, figs. 7a, 7b.
41678. **Beyrichia tricollina** Ulrich. Holotype.  
Hamilton (Dev.). Eighteen Mile Creek, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 189, pl.  
12, fig. 6.
14889. **Bicia gemma** (Billings). Plesiotype.  
15349. Lower Cambrian. Troy, New York; Bic Harbor, Quebec,  
Canada.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 678.  
See *Obolella gemma*.
35260. **Bicia whiteavesi** Walcott. Cotypes.  
Lower Cambrian. Troy, New York.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 680.
35213. **Billingsella coloradoensis** (Shumard). Plesiotype.  
Gallatin (Up. Cambrian). Gallatin Range, Yellowstone  
National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 450, pl.  
61, figs. 1, 1a-d.
113332. **Bittium annettæ** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
273, pl. 20, fig. 3.
113343. **Bittium (Styliferina) boioplex** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
275, pl. 21, fig. 14.
113344. **Bittium (Styliferina) cerithidioides** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
276, pl. 16, fig. 8.
113328. **Bittium chipolanum** Dall. H.  
Oligocene. Chipola River, Calhoun County, Flo.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II  
272, pl. 21, fig. 15.



113329. *Bittium chipolanum burnsii* Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 272, pl. 21, fig. 18.
113331. *Bittium cossmannii* Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 273, pl. 21, fig. 16.
113330. *Bittium permutabile* Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 272, pl. 21, fig. 17.
113333. *Bittium podagrinum* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 274, pl. 21, fig. 12.
107124. *Bittium (Styliferina) præformatum* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 318, pl. 28, fig. 2.
112522. *Bittium (Styliferina?) priscum* Dall. Holotype.  
Oligocene. Hillsboro Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, pl. 11, fig. 6; Pt. II, 1892, p. 275.
162547. *Bittium williamsoni* Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 295, pl. 6, fig. 11.
41329. *Bollia granifera* Ulrich. Holotype.  
St. Louis (Miss.). Elizabethtown, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 205, pl. 12, figs. 12a, b.
41331. *Bollia obesa* Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 189, pl. 14, figs. 5a-c.
41524. *Bollia persulcata* (Ulrich). Plesiotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 116, figs. 3, 3a-d.  
See *Beyrichia persulcata*.
41691. *Bollia pumila* Ulrich. Holotype.  
Richmond (Ord.). Near Weisburg, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 117, pl. 12, figs. 1a, 1b.



41519. **Bollia subæquata** Ulrich. Cotypes.  
 41520. Trenton (Ord.). Fountain and St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 669, pl. 46, figs. 26-29.
41330. **Bollia ungula** Jones. Plesiotype.  
 Onondaga (Dev.). Falls of the Ohio.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 188, pl. 14, figs. 6a, b.
135875. **Bornia dodona** Dall. Holotype.  
 Oligocene. Oak Grove, Santa Rosa County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1150, pl. 45, fig. 16.
135876. **Bornia floridana** Dall. Holotype.  
 Oligocene. Oak Grove, Santa Rosa County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1150, pl. 45, fig. 2.
155763. **Bornia lioica** Dall. Holotype.  
 Pliocene. Caloosahatchie River, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1151, pl. 25, fig. 6.
155764. **Bornia mazyckii** Dall. Holotype.  
 Pliocene. Caloosahatchie River, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1152, pl. 25, fig. 8.
108493. **Bornia plectopygia** Dall. Holotype.  
 Claibornian (Eocene). Claiborne Alabama.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1149, pl. 49, fig. 9.
115094. **Bornia rota** Dall. Holotype.  
 Miocene. Natural Well, Duplin County, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1151, pl. 45, fig. 11.
108492. **Bornia scintillata** Dall. Holotype.  
 Claibornian (Eocene). Claiborne, Alabama.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1149, pl. 49, fig. 10.
147034. **Borsonia ludoviciana** Vaughan. Holotype.  
 Jackson (Eocene). Montgomery, Louisiana.  
 Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 34, pl. 2, figs. 6, 6a.
43221. **Botryllopora socialis** Nicholson. Plesiotype and f  
 se  
 Hamilton (Dev.). Eighteen Mile Creek, New York  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 490, pl. 43, figs. 9-9a



157837. **Brachysphingus liratus** (Gabb). Plesiotypes.  
Lower Tejon (Eocene). One mile southeast of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1048, pl. 66, figs. 5, 6.
115406. **Brissopsis antillarum** Cotteau. Cotypes.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet. Akad. Hand., XIII, 6, 1874, p. 37,  
pl. 6, figs. 19-25.
115396. **Brissus exiguus** Cotteau. Holotype.  
Miocene. Anguilla, West Indies  
Cotteau, Kongl. Svenska Vet. Akad. Hand., XIII, 6, 1874, p. 35.
43015. **Bronteus tullius** Hall and Clarke. Plastotype.  
Tully (Dev.). Near Otisco, Onondaga County, New York.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 12,  
pl. 8a, figs. 34, 35.
- 26106 **Brooksella alternata** Walcott. Cotypes.  
to Middle Cambrian. Coosa Valley, Alabama.  
26147. Walcott, Proc. U. S. Nat. Mus., XVIII, 1896, p. 612, pl. 31,  
figs. 1-5; Mon. XXX, U. S. Geol. Surv., 1898, p. 23, pls. 1,  
2, 3, figs. 1-10; pl. 4.
- 26148 **Brooksella confusa** Walcott. Cotypes.  
to Middle Cambrian. Coosa Valley, Alabama.  
26150. Walcott, Proc. U. S. Nat. Mus., XVIII, 1896, p. 612, pl. 31,  
figs. 7-7b; Mon. XXX, U. S. Geol. Surv., 1898, p. 30, pl. 3,  
figs. 11, 12, 12a, 13, 13a.
17301. **Bucania bidorsata** Hall. Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 271, pl. 1, figs.  
13-13c.  
=Tetranota bidorsata.
45714. **Bucania crassa** Ulrich. Holotype.  
Richmond (Ord.). Near Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 893, pl. 67, figs. 46-48.
45715. **Bucania elliptica** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Three miles south of Cannon Falls,  
Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 888, pl. 66, figs. 11, 12.
46049. **Bucania emmonsii** Ulrich and Scofield. Cotypes.  
46050. Stones River (Ord.). Murfreesboro, Tennessee.  
Black River (Ord.). Near Fountain, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 887, pl. 66, figs. 1-3.



45716. **Bucania frankfortensis** Ulrich. Holotype.  
Trenton (Ord.). Frankfort, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 891, pl. 66, figs. 30-33.
45717. **Bucania halli** Ulrich and Scofield. Cotypes.  
45718. Stones River (Ord.). Cannon Falls, Minnesota.  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 886, pl. 66, figs. 4-8.
45719. **Bucania lindsleyi** (Safford). Holotype.  
Trenton (Ord.). Dekalb County, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, pt. II, 1897, p. 889, pl. 66, figs. 24, 25.  
See *Bellerophon lindsleyi*.
45720. **Bucania micronema** Ulrich. Holotype.  
Trenton (Ord.). Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 892, pl. 66, figs. 26-29.
45721. **Bucania minnesotensis** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 887, pl. 66, figs. 9, 10.
45722. **Bucania nana** Ulrich. Cotypes.  
Trenton (Ord.). One and one-half miles south of Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 895, pl. 66, figs. 41-44.
45723. **Bucania nana subpatula** Ulrich. Holotype.  
Trenton (Ord.). One and one-half miles south of Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 896, pl. 66, figs. 45, 46.
45724. **Bucania nashvillensis** Ulrich. Cotypes.  
45725. Trenton (Ord.). Nashville and Dekalb County, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 890, pl. 66, figs. 36-40.
45726. **Bucania peracuta** Ulrich. Holotype.  
Trenton (Ord.). Dekalb County, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 896, pl. 66, figs. 34, 35.
45727. **Bucania punctifrons** Emmons. Plesiotypes.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 894, pl. 67, figs. 41-44.



45728. **Bucania rugatina** Ulrich. Holotype.  
Trenton (Ord.). One and one-half miles south of Burgin,  
Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 890, pl. 66, figs. 13-15.
45729. **Bucania simulatrix** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 892, pl. 63, figs. 48, 49; pl. 67, fig. 45.
45730. **Bucania singularis** Ulrich. Holotype.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 894, pl. 66, fig. 47.
45731. **Bucania subangulata** Ulrich. Cotypes.  
Trenton (Ord.). One and one-half miles south of Burgin,  
Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept. III, Pt. II,  
1897, p. 891, pl. 66, figs. 20-23.
45732. **Bucania sublata** Ulrich and Scofield. Cotypes.  
45733. Stones River (Ord.). Minneapolis, Minnesota.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 888, pl. 66, figs. 16-19.
24344. **Bucaniella coutinhoana** (Hartt and Rathbun). Plesiotype.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 38, pl. 3,  
figs. 19, 20.  
See *Bellerophon coutinhoanus*.
45734. **Bucanopsis carinifera** Ulrich. Cotypes.  
Trenton (Ord.). Near Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 925, pl. 62, figs. 56-61.
45735. **Bucanospira expansa** Ulrich. Cotypes.  
Niagara (Sil.). Wayne County, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1044, figs. 9a-c.
9881. **Buccinopsis parryi** Conrad. Holotype.  
Cretaceous. Between Rio San Pedro and Rio Puercos,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, pt. 2, 1857,  
p. 158, pl. 13, figs. 5a, 5b.
292. **Buccinum? nebrascensis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River. South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 67.  
~~Indobuccinum~~ **nebrascense**.



8628. **Buchiceras swallovi** (Shumard). Plesiotypes.  
 22938. Colorado (Cret.). Glendale, Long Valley, Utah.  
 White, Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. I, 1876,  
 p. 202, pl. 20, figs. 1a-c.—Stanton, Bull. No. 106, U. S. Geol.  
 Surv., 1893, p. 168, pl. 37, fig. 1; pl. 38, figs. 1-3.
35366. **Bulimorpha chrysalis** Meek and Worthen. Plesiotypes.  
 35367. Rico (Upper Carb.). Scotch and Marguerite creeks,  
 Rico Quadrangle, Colorado.  
 Girty, Prof. Pap. 16, U. S. Geol. Surv., 1903, p. 466, pl. 10, figs.  
 6-6b, 7, 7a.
111965. **Bulimulus (? Anctus) americanus** (Heilprin). Plesiotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
 pl. 1, figs. 9, 9a.
111971. **Bulimus (? Anctus) americanus laxus** Dall. Cotypes.  
 Oligocene. Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7.
119970. **Bulimulus (? Anctus) americanus partulinus** Dall. Cotypes.  
 Oligocene. Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7.
111960. **Bulimulus (? Anctus) floridanus** (Conrad). Plesiotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 5,  
 pl. 1, fig. 11.
111962. **Bulimulus (? Anctus) heilprinianus** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 6,  
 pl. 1, figs. 6b, 10.
111964. **Bulimulus (? Anctus) stearnsii** Dall. Holotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
 pl. 1, fig. 12.
2115. **Bulimus ? teres** Meek and Hayden. Holotype.  
 Laramie (Cret.). Three miles below Fort Union, North  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 117.  
 = *Columna teres*.
2113. **Bulimus ? vermiculus** Meek and Hayden. Holotype and  
 paratypes.  
 Laramie (Cret.). Three miles below Fort Union, North  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 118  
 = *Columna vermicula*.



12481. **Bulinus atavus** White. Holotype.  
Laramie (Cret.). Dog Creek, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 86, pl. 24, figs. 5a-5b; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 450, pl. 25, figs. 6, 7; Bull. No. 34, U. S. Geol.  
Surv., 1886, p. 25, pl. 3, figs. 7, 8.
20070. **Bulinus atavus** White? Plesiotypes.  
Laramie (Cret.) and Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 25, pl. 3, figs. 9, 10.
12469. **Bulinus disjunctus** White. Cotypes.  
Laramie (Cret.). Crow Creek, Northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terrs., 1878 (1883),  
pt. I, p. 86, pl. 24, figs. 6a, 6b; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 451, pl. 25, figs. 4, 5.
2120. **Bulinus longiusculus** (Meek and Hayden). Holotype and  
2121. paratypes.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 541, pl. 43,  
figs. 16a, 16b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 451, (pl. 25, fig. 8.)  
See *Physa longiuscula*.
19181. **Bulinus ? rhomboideus** (Meek and Hayden). Holotype.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 542, pl. 43,  
fig. 17; White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 451,  
pl. 25, fig. 9.  
See *Physa rhomboidea*.
2118. **Bulinus subelongatus** Meek and Hayden. Holotype.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terrs., IX, 1876, p. 540, pl. 42,  
figs. 13a, 13b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 450, pl. 25, figs. 10, 11.  
See *Physa subelongata*.
280. **Bulla minor** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 69.  
= *Haminea minor*.
278. **Bulla occidentalis** Meek and Hayden. Holotype and  
paratypes.  
Fort Pierre or Fox Hills (Cret.). Yellowstone River,  
Miles City, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 69.  
= **Haminea occidentalis**.



3607. **Bulla petrosa** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 727, Atlas, pl. 19,  
fig. 8.  
= *Cylichna petrosa*.
97486. **Bulla striata attenuata** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
219, pl. 13, fig. 10a.
279. **Bulla subcylindrica** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Near mouth of Milk River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 270.  
= *Haminea subcylindrica*.
115432. **Bulla vendryesiana** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 407, pl. 16, fig. 6.
281. **Bulla volvaria** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 69.  
= *Cylichna* ? *volvaria*.
113894. **Bullina (Abderospira) chipolana** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 32.  
= *Micromelo (Abderospira) chipolana*.
135143. **Bullinella jacksonensis exta** Harris. Holotype.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Ark., 1894, Pt. II, p. 158, pl. 6,  
fig. 3.
43273. **Buskopora lunata** Rominger. Plesiotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VII, 1890, p. 489, pl. 48, figs. 7-7d.  
= *Buskopora dentata*.
1863. **Busycon? blakei** Conrad. Holotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 322, pl. 2, fig. 13.
111625. **Busycon scalarispira** Conrad. Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 102, pl. 17,  
figs. 11, 12.



46095. **Byssonychia acutirostris** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 634, pl. 45, figs. 8, 9; pl. 46, fig. 10.
46096. **Byssonychia alveolata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 631, pl. 48, figs. 1-3.
46097. **Byssonychia(?) byrnesi** Ulrich. Cotypes.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 635, pl. 47, figs. 4, 5.
46098. **Byssonychia cultrata** Ulrich. Cotypes.  
46596. Richmond (Ord.). Waynesville, Ohio; Versailles, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 632, pl. 45, figs. 5-7.
46099. **Byssonychia grandis** Ulrich. Cotypes.  
46100. Richmond (Ord.). Oxford and Clarksville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 631, pl. 46, figs. 6-9.
46101. **Byssonychia imbricata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 635, pl. 46, figs. 4, 5.
46102. **Byssonychia intermedia** (Meek and Worthen). Plesiotype.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 499, pl. 35, figs. 25, 26.
46103. **Byssonychia obesa** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 630, pl. 45, figs. 10, 11, 12.
46104. **Byssonychia præcursa** Ulrich. Cotype.  
Lorraine (Ord.). Lorraine, New York.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 633, pl. 45, fig. 1.
46105. **Byssonychia radiata** (Hall). Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv., Minn. Final Rept., III, Pt. II, 1894, p. 477, fig. 6.
46106. **Byssonychia richmondensis** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 632, pl. 45, figs. 3, 4.
46107. **Byssonychia suberecta** Ulrich. Cotypes.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 634, pl. 45, figs. 13-15.
46108. **Byssonychia vera** Ulrich. Cotypes.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 629, text figs. a, b, c.



7836. **Bythinella gregaria** Meek. Cotypes.  
Eocene. Pacific Springs, Wyoming.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terrs., 1871, p. 317.—  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 48, pl. 19, figs. 6a, 6b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 466, pl. 28, figs. 12, 13.
23120. **Bythinella latentis** White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 58, pl. 10, figs.  
10, 11.
113564. **Bythinella nickliniana attenuata** (Haldeman). Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
338, pl. 21, fig. 19.
41794. **Bythocypris** (?) **curta** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 689, pl. 44, figs. 36-38.
41795. **Bythocypris cylindrica** (Hall). Plesiotypes.  
41796. Trenton (Ord.). Cannon Falls, Minnesota.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 687, pl. 44, figs. 29-35.
41822. **Bythocypris devonica** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 196, pl.  
17, figs. 1a-c.
41793. **Bythocypris granti** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept. III, Pt. II,  
1894, p. 689, pl. 44, figs. 39-42.
43157. **Bythocypris indianensis** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 197, pl.  
16, figs. 11a-c.
41799. **Bythocypris parilis** Ulrich. Cotypes.  
Eocene. Upper Marlboro, Maryland.  
Ulrich, Md. Geol. Surv., Eocene, 1901, p. 117, pl. 16, figs. 5-8.
41823. **Bythocypris punctulata** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 19  
17, figs. 2a-c.



41707. *Bythocypris punctulata niagarensis* Ulrich. Holotype.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 196.
41728. *Bythocypris ? robusta* Ulrich. Holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 690, figs. 52a-d.
41798. *Bythocypris subaequata* Ulrich. Cotypes.  
Eocene. Upper Marlboro, Maryland.  
Ulrich, Md. Geol. Surv., Eocene, 1901, p. 116, pl. 16, figs. 1-4.
43514. *Bythopora alcicornis* Ulrich. Cotypes.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 264, pl. 26, figs. 7-9.
43513. *Bythopora herricki* Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 263, pl. 26, figs. 1-6.
44064. *Bythopora striata* Ulrich. Cotypes.  
Richmond (Ord.). Middletown, Ohio.  
Ulrich, Geol. Surv. Canada, Contrib. Micro-Pal., Cambro-Sil., Pt. II, 1889, p. 36.
43220. *Bythotrypa laxata* Ulrich. Plesiotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 325, pl. 28, figs. 21-25.
30912. *Cacabocrinites sculptus* Troost. Chirotype.  
Onondaga (Dev.). Falls of the Ohio.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
112757. *Cadulus floridanus* Dall. Holotype.  
Miocene. Alum Bluff, Appalachicola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 446, pl. 23, fig. 26.
112758. *Cadulus floridanus burnsii* Dall. Cotypes.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 446.
112759. *Cadulus parianus* Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 325, pl. 30, fig. 7.
43522. *Cæcum carolinianum* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. II, 1892, p. 300, pl. 22, fig. 25.



113401. **Cæcum coronellum** Dall. Cotypes.  
 113402. Miocene. Cape Fear River, North Carolina, and Caloosahatchie River, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 298, pl. 20, fig. 11a.
83590. **Cæcum floridanum compactum** Dall. Cotypes.  
 Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 298, pl. 20, fig. 9b.
112332. **Cæcum tortile** Dall. Cotypes.  
 Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 301, pl. 13, fig. 9a.
112333. **Cæcum (tortile var.?) ibex** Dall. Cotypes.  
 Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 301, pl. 20, fig. 10a.
25560. **Calandrites cineratus** Scudder. Cotypes.  
 Older Tertiary. Roan Mountains, Western Colorado.  
 Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 151, pl. 12, fig. 12.
25557. **Calandrites defessus** Scudder. Cotypes.  
 Older Tertiary. Roan Mountains, Western Colorado.  
 Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 150, pl. 12, fig. 15.
8910. **Callianassa ulrichi** White. Holotype.  
 107355. Midway (Eocene). Little Rock, Arkansas.  
 White, Proc. U. S. Nat. Mus., III, 1880, p. 161; IV, 1881, p. 137, pl. 1, figs. 9, 10.—Harris, Ann. Rept. Geol. Surv. Ark., 1872, II, p. 36, pl. 1, figs. 2a, 2b.
113046. **Calliostoma aphelium** Dall. Holotype.  
 Miocene. Jones Wharf, Patuxent River, Maryland.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 400, pl. 22, fig. 29.
113065. **Calliostoma (Eutrochus) ceramicum** Dall. Holotype.  
 Oligocene. Ten Mile Creek, near Baileys Ferry, Chipola River, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 404, pl. 18, fig. 10.
113062. **Calliostoma cyclus** Dall. Holotype.  
 Miocene. Natural Well, Duplin County, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 404, pl. 23, fig. 20.



113042. **Calliostoma (eboreum Wagner var.?) wagneri** Dall. Holotype.  
Miocene. Wescott Farm, Church Hill, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 399, pl. 21, fig. 3.
113049. **Calliostoma erosum** Dall. Holotype.  
Croatan (Pliocene). Neuse River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 400, pl. 18, fig. 7.
113041. **Calliostoma exile** Dall. Holotype.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 397.
113038. **Calliostoma grammaticum** Dall. Cotypes.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 397, pl. 18, fig. 2a.
113052. **Calliostoma harrisii** Dall. Holotype.  
Miocene. Bellefield, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 401, pl. 18, fig. 6.
113064. **Calliostoma (Eutrochus) limulum** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 404, pl. 18, fig. 7a.
113025. **Calliostoma metrium** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 394, pl. 22, fig. 27.
113048. **Calliostoma nitens** Lea. Plesiotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 400, pl. 22, fig. 30.
113021. **Calliostoma philanthropus** (Conrad). Plesiotype.  
Miocene. Near Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 390, pl. 18, fig. 9a.
113022. **Calliostoma philanthropus basicum** Dall. Cotypes.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. II, 1892, p. 392.
113034. **Calliostoma roseolum permagnum** Dall. Cotypes.  
Pliocene, Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 395.



113036. *Calliostoma virginicum* (Conrad). Plesiotypes.  
Miocene. Near Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 396,  
pl. 18, fig. 2.
113037. *Calliostoma* (*virginicum* var.?) *aluminium* Dall. Holotype.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
396.
113027. *Calliostoma willcoxianum* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
395, pl. 18 fig. 1.
341. *Callista* (*Dosiniopsis*?) *deweyi* (Meek and Hayden).  
Cotypes.  
Montana (Cret.). Moreau River, South Dakota, and  
Yellowstone River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 182, pl. 17, figs.  
15a-e.  
See *Cytherea deweyi*.
1938. *Callista* (*Dosiniopsis*) *nebrascensis* (Meek and Hayden).  
Plesiotypes.  
Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 184, text fig. 15.  
See *Cytherea nebrascensis* and *Callista robusta*.
231. *Callista* (*Dosiniopsis*?) *orbiculata* (Hall and Meek).  
Plesiotypes.  
Fort Benton or Colorado (Cret.). Five miles below James  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 186, pl. 5, figs.  
2a-c.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 108,  
pl. 24, figs. 9, 10.
176. *Callista* (*Dosiniopsis*) *owenana* (Meek and Hayden).  
Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 183, pl. 37, fig. 1.  
See *Cytherea owenana*.
418. *Callista* ? *pellucida* Meek and Hayden. Holotype and  
paratypes.  
Fort Pierre (Cret.). Missouri River, 200 miles above Milk  
Creek, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 187, pl. 17-  
figs. 10a-e.  
See *Cytherea pellucida*.



1938. **Callista robusta** (Meek and Hayden). Cotypes.  
Montana (Cret.). Deer Creek, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 443.  
= **Callista** (Dosiniopsis) **nebrascensis**.
162525. **Callista subdiaphana pedroana** Arnold. Holotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 144, pl. 13, fig. 2.
232. **Callista** (**Aphrodina**?) **tenuis** (Hall and Meek). Plesiotypes.  
Fort Benton or Colorado (Cret.). Bear Creek, near base  
of Black Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 188, pl. 5, figs.  
1a-d.—Stanton, Bull. No. 106 U. S. Geol. Surv., 1893, p. 109,  
pl. 24, figs. 7, 8.
113637. **Callocardia** (**Agriopoma**) **gatunensis** Dall. Holotype.  
Gatun (Oligocene). Near Gatun, Panama Canal, Panama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1261, pl. 54, fig. 1.
- 6392a. **Callocardia** **gatunensis** var. **multifilosa** Dall. Holotype.  
Gatun (Oligocene). Near Gatun, Panama Canal, Panama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1261, pl. 54, fig. 15.
164870. **Callocardia** (**Pitaria**?) **kincaidii** Dall. Holotype.  
Miocene. Popof Island, Shumakins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 115, pl. 10, fig. 1.
23501. **Callocardia** (**Agriopoma**) **sayana** Conrad. Holotype.  
Miocene. York River, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1261, pl. 54, fig. 16.
114747. **Callocardia** (**Agriopoma**) **sincera** Dall. Holotype.  
Chipola (Oligocene). Baileys Ferry, Chipola River, Cal-  
houn County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1261, pl. 55, fig. 12.
13044. **Callonema occidentalis** Walcott. Cotypes.  
Middle Devonian. Combs Peak, Eureka District, Nevada.  
Walcott, Mem. VIII, U. S. Geol. Surv., 1884, p. 189, pl. 16,  
figs. 3, 3a.
43518. **Callopora ampla** Ulrich. Cotypes and figured sections.  
43519. Trenton (Ord.). Cannon Falls and Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
1893, p. 181, pl. 23, figs. 13, 15, 18-20, 22, 23, 27, 28.



43520. **Callopora angularis** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 277, pl. 22, figs. 37-41.
43237. **Callopora cincinnatiensis** Ulrich. Holotype.  
Cincinnatian ? (Ord.). ? Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 93, pl. 4,  
figs. 8, 8a.  
= *Lioclema occidens*.
43515. **Callopora crenulata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 284, pl. 22, figs. 18-23.  
= *Calloporina crenulata*.
43517. **Callopora dumalis** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 282, pl. 23, figs. 1-8.
43648. **Callopora elegantula** Hall. Plesiotypes and figured sections.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 250, pl. 11,  
figs. 6-6b.
43524. **Callopora goodhuensis** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 282, pl. 23, figs. 9, 10, 21, 29.
43521. **Callopora in controversa** Ulrich. Holotype and figured  
sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 278, pl. 22, figs. 33-36.
43522. **Callopora multitabulata** Ulrich. Cotypes and figured  
43523. sections.  
Black River (Ord.). St. Paul, Minnesota.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 280, pl. 23, figs. 11, 12, 16, 17, 24, 25, 26, 30, 31.
43525. **Callopora pulchella** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 283, pl. 22, figs. 1-12.
43526. **Callopora pulchella persimilis** Ulrich. Cotypes and  
figured section  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 284, pl. 22, figs. 13-17.



43393. **Callopora subnodosa** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Geol. Surv. Ill., VII, 1890, p. 417, pl. 33, figs. 5-5c.
43649. **Callopora subplana** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 253, pl. 11,  
figs. 7-7b.
43816. **Callopora undulata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis and St. Paul, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1886, p. 95; Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. I, 1893, p. 279, pl. 22, figs. 24-31.
40386. **Calloporella harrisi** Ulrich. Holotype and figured sections.  
43647. Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 91, pl. 1,  
figs. 5-5c.  
• *Calloporella circularis*.
43515. **Calloporina crenulata** (Ulrich). Figured sections of cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 47, pl. 14, figs. 17-19.  
• See *Callopora crenulata*.
43217. **Calloporina parva** Ulrich and Bassler. Cotypes and figured  
sections.  
Black River (Ord.). Two miles south of Belfast, Marshall  
County, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 48, pl. 14, figs. 13-16.
38525. **Calosoma heeri** Seudder. Cotypes.  
Upper Miocene. Oeningen, Baden, Germany.  
Seudder, Geol. Mag., Dec. IV, II, 1895, p. 120, pl. 6, fig. 4.
38701. **Calymene anchiops** Green. Plastotype.  
Scholarie Dev. Ulster County, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 35. Cast  
No. 1.  
*Dalmanites Chasmops anchiops*.
4010. **Calymene blumenbachii** Brongniart. Plastotype.  
Denton, Ord. Denton Falls, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 28. Cast  
No. 1.  
*Calymene calymenella*.



25702. **Calymene bufo** Green. Plastotype.  
Devonian. New Jersey (? Patterson).  
Green, Mon. Trilobites N. America, Phila., 1832, p. 41. Cast  
No. 10.  
= *Phacops bufo*.
4912. **Calymene bufo rana** Green. Plastotype.  
Hamilton (Dev.). Seneca, Ontario County, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 42. Casts  
Nos. 11, 12.  
= *Phacops bufo rana*.
4926. **Calymene callicephala** Green. Plastotype.  
Lorraine? (Ord.). Near Cincinnati, Ohio.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 30. Cast  
No. 2.  
See *Calymene blumenbachii*.
41855. **Calymene callicephala** Green, var. Plesiotype.  
Richmond (Ord.). Three miles north of Spring Valley,  
Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 700.
4924. **Calymene diops** Green. Plastotype.  
Devonian. Ohio.  
Green, Mon. Trilobites N. America, Phila., 1833, p. 37. Cast  
No. 8.  
= *Proetus diops*.
4927. **Calymene microps** Green. Plastotype.  
Lorraine? (Ord.). Near Ripley, Ohio.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 34. Cast  
No. 6.  
= *Pterygometopus microps*.
41871. **Calymene nasuta** Ulrich. Cotype.  
Niagara (Sil.). Osgood, Indiana.  
Ulrich, Journ. Cincinnati, Soc. Nat. Hist., II, 1879, p. 132, fig. 3.  
= *Calymenella nasuta*.
4918. **Calymene phlyctainodes** Green. Plastotype.  
Niagara (Sil.). Springfield, Ohio.  
Green, Am. Journ. Sci., XXXII, 1837, p. 167. Cast No. 54.
4908. **Calymene platys** Green. Plastotype.  
41872. Schoharie (Dev.). Helderberg Mountains, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 32.  
Nos. 4 and 5.



4947. **Calymene rowii** Green. Plastotype.  
Hamilton (Dev.). Fly Creek, Otsego County, New York.  
Green, Amer. Journ. Sci., XXXIII, 1838, p. 406. Cast No. 49.  
= *Proetus rowi*.
5004. **Calymene selenicephala** Green. Plastotype.  
Ordovician? New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 31. Cast No. 3.
15363. **Camarella antiquata** Billings. Plesiotype.  
Lower Cambrian. East of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 122, pl. 7, fig. 8;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 613, pl. 72, fig. 3.
24628. **Camarella ? minor** Walcott. Cotype.  
Lower Cambrian. Near Stissingville, Dutchess County,  
New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 36; Tenth Ann.  
Rept. U. S. Geol. Surv., 1890, p. 614, pl. 72, figs. 4-4d.
46549. **Camarocladia dichotoma** Ulrich and Everett. Figured sec-  
tions of cotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 281, pl. 7,  
figs. 1a, 1b.
27760. **Camarocrinus saffordi** Hall. Plesiotype.  
Helderbergian (Dev.). Allen's Mill, Benton County,  
Tennessee.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, pl. 40,  
fig. 10.
35080. **Camarocrinus stellatus** Hall. Plesiotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 269,  
pl. 44, figs. 1-5.
35084. **Camarocrinus ulrichi** Schuchert. Cotypes.  
35085. Helderbergian (Dev.). One and one-eighth miles south  
of Franks and 3 miles northeast of Daugherty, Indian  
Territory.  
Schuchert, Amer. Geol., XXXII, 1903, p. 239; Smithsonian Misc.  
Coll., Quart., XLVII, 1904, p. 271, pl. 40, figs. 6-8, pls. 41-43.
35086. **Camarocrinus ulrichi stellifer** Schuchert. Holotype and  
35088. paratype.  
Helderbergian (Dev.). Tishomingo quadrangle, and two  
miles south of Franks, Indian Territory.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 272,  
pl. 40, fig. 9; pl. 41, fig. 6.



14348. **Camarophoria cooperensis** (Shumard)? Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 224, pl. 18, fig. 6.
35173. **Camarophoria ringens** (Swallow). Plesiotype.  
Madison (Miss.). Gallatin Range, Yellowstone National  
Park.  
Girty, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 537, pl. 69,  
figs. 1a, 1b, 1c.
14451. **Camarotoechia contracta** (Hall). Plesiotypes.  
33939 Ouray (Upper Dev.). At many localities of the Ouray  
to Limestone in Central Colorado.  
33943. Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 57,  
pl. 7, figs. 2-4.
7798. **Camarotoechia endlichi** (Meek). Cotypes and plesiotypes.  
14448. Ouray (Upper Dev.). At many localities in the Ouray  
33944 Limestone of Central Colorado.  
to Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 56,  
33948. pl. 6, figs. 1-4; pl. 7, fig. 1.  
See *Rhynchonella endlichi*.
35174. **Camarotoechia herrickana** Girty. Cotypes.  
35175. Madison (Miss.). Crowfoot Ridge and Divide between  
Gallatin River and Panther Creek, Yellowstone  
National Park.  
Girty, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 539, pl.  
69, figs. 2a, 2b, 2c.
35176. **Camarotoechia metallica** (White). Plesiotypes.  
35177. Madison (Miss.). Yellowstone National Park.  
Girty, Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 540, pl.  
69, figs. 3b, 3c, 3d, 3e.
39910. **Campanulites tessellatus** Troost. Chirotype.  
Ordovician. Duck River, near Columbia, Maury County,  
Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
7619. **Campeloma macrospira** Meek. Holotype.  
Bear River (Cret.). Bear River Valley, Southwestern  
Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 102, pl. 30, fig. 2a; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 469, pl. 8, figs. 6, 7; Bull. No. 128, U. S. Geol.  
Surv., 1895, p. 60, pl. 10, figs. 2, 3.
8139. **Campeloma multilineata** Meek and Hayden. Plesi-  
9029. Laramie (Cret.). Heart River, North Dakota, and  
Creek, Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 469,  
figs. 1-7.



9029. **Campeloma multilineata** Meek and Hayden. Plesiotypes.  
Laramie (Cret.). Crow Creek, Northern Colorado.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 101, pl. 28, figs. 4a, 4b; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 469, pl. 27, figs. 1, 7.

2154. **Campeloma multilineata** (Meek and Hayden). Holotype and  
paratypes.  
Laramie (Cret.). Fort Clark, North Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 586, pl. 44,  
figs. 1a, 1b.

See *Paludina multilineata*.

2148. **Campeloma multistriata** (Meek and Hayden). Holotype and  
paratypes.  
Laramie (Cret.). Mouth of Yellowstone River, North  
Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 588, pl. 43, figs.  
15a-e.

See *Melania multistriata*.

8140. **Campeloma producta** White. Holotype and plesiotypes.  
Laramie (Cret.). Valley of Yellowstone River, Montana.

White, Proc. U. S. Nat. Mus., V, 1882, p. 97, pl. 3, figs. 7-9;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 469, pl. 26, figs.  
21-24 (25?), 26, 27.

2153. **Campeloma vetula** (Meek and Hayden). Holotype and  
paratypes.  
Laramie (Cret.). Bad Lands of Judith River, Montana.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 587, pl. 42,  
figs. 14a, 14b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 469, pl. 27, figs. 8, 9.

See *Paludina vetula*.

680. **Camptonectes bellistriatus** (Meek). Cotypes.  
Jurassic. Red Buttes, North Platte, Wyoming.

Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 77, text fig. 3.—Meek, Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 356, App. J, pl. 3,  
figs. 3a, 3d.

See *Pecten bellistriata*.

1885. **Camptonectes bellistriatus** (Meek). Plesiotype.  
Jurassic. Big Horn Mountains, Wyoming.

Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 613,  
pl. 72, fig. 12.

12339. **Camptonectes bellistriatus** (Meek). Plesiotype.  
Jurassic. Black Hills, South Dakota.

Whitfield, Rept. Geol. and Resources, Black Hills, Dakota, 1880,  
p. 351, pl. 4, fig. 7.



28933. **Camptonectes bellistriatus distans** Stanton. Cotypes.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 614,  
pl. 72, fig. 13.
221. **Camptonectes? extenuatus** (Meek and Hayden). Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 78, pl. 3, fig. 6.  
See *Pecten extenuatus*.
12335. **Camptonectes extenuatus** Meek and Hayden. Plesiotype.  
Jurassic. East of Belle Fourche River, near Bear Lodge,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources, Black Hills, Dakota, 1880,  
p. 353, pl. 4, fig. 4.
12552. **Camptonectes extenuatus** Meek and Hayden. Plesiotype.  
Jurassic. Northwest of Rawlins, Wyoming.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 290, pl. 7, fig. 18.
12535. **Camptonectes pertenuistriatus** Hall and Whitfield. Holotype.  
Jurassic. Northwest of Rawlins, Wyoming.  
Hall and Whitfield, Rept. U. S. Geol. Expl., 40th Par., IV, Pt. II,  
1877, p. 291, pl. 7, fig. 17.
28934. **Camptonectes pertenuistriatus** Hall and Whitfield. Plesiotype.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 614,  
pl. 72, fig. 11.
8643. **Camptonectes platessa** White. Holotype.  
Colorado (Cret.). Five miles west of Mineral Spring,  
Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 25; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 176, pl. 18, fig. 5a.—Stanton, Bull. No. 106, U. S.  
Geol. Surv., 1893, p. 72, pl. 9, fig. 6.
8179. **Camptonectes platessiformis** White. Holotype.  
Jurassic. North base of Aquarius Plateau, Southern Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 143, pl. 37, fig. 5a.
8580. **Camptonectes stygius** White. Cotypes.  
Jurassic. Bluff south of Dirty Devil River and North Fork  
of Virgin River, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid.,  
p. 23; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, 1  
1876, p. 164, pl. 13, figs. 2a-c.



111516. **Cancellaria alternata** Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 112, pl. 20,  
figs. 5-10.
115471. **Cancellaria barretti** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 289,  
pl. 17, fig. 11.
97354. **Cancellaria conradiana** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson.  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 42, pl. 3, fig. 13.
115472. **Cancellaria epistomifera** Guppy. Holotype.  
Miocene. Haiti, West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXXII, 1876, p. 520,  
pl. 28, fig. 9.
115470. **Cancellaria lævescens** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 289,  
pl. 17, fig. 12.
22926. **Cancellaria malachitensis** Stanton. Cotypes.  
Colorado (Cret.). Near Malachite, Huerfano Park,  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 158, pl. 33,  
figs. 6, 7.
115473. **Cancellaria moorei** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 289,  
pl. 17, fig. 7.
113762. **Cancellaria rowelli** Dall. Holotype.  
Oligocene? Potrero, Rio Amina, Santo Domingo, West  
Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 307, pl. 29, fig. 1.
115474. **Cancellaria scalatella** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag. London, Dec. II, I, 1874, p. 408, pl. 17, fig. 4.
113186. **Cancellaria (Trigonostoma) sericea** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
224, pl. 14, figs. 7, 7a.
20128. **Cancellaria turneri** White. Cotype.  
Chico-Tejon (Cret.). Martinez, Contra Costa County,  
California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 25, pl. 3, figs. 6, 7.



97355. **Cancellaria venusta** Tuomey and Holmes. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 43,  
pl. 3, fig. 12.
157510. **Cancer proavitus** Packard. Cotype.  
Miocene. Gay Head, Massachusetts.  
Packard, Proc. Amer. Acad. Arts and Sci., XXXVI, 1900, p. 3.
11468. **Cantharus? julesburgensis** White. Holotype.  
Montana (Cret.). Julesburg, Sedgwick County, Colorado.  
White, Proc. U. S. Nat. Mus., IV, 1881, p. 138, figs. 1, 2.
255. **Cantharus (Cantharulus) vauhani** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Near mouth of Heart River, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 379, pl. 32, figs.  
5a, 5b, and text fig. 48.  
See *Fusus vauhani*.
9840. **Caprina occidentalis** Conrad. Holotype.  
Fredericksburg (Cret.). Near mouth of Puercos [Pecos]  
River, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2,  
1857, p. 147, pl. 2, figs. 1a-c.
9891. **Caprina planata** Conrad. Cotypes.  
Cretaceous. Oak Creek, near Puercos [Pecos] River,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 147, pl. 2, figs. 2a, 2b.
12496. **Capsa texana** Conrad. Holotype.  
Washita? (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 164, pl. 21, fig. 6.
251. **Capulus fragilis** Meek and Hayden. Holotype  
Fox Hills (Cret.). Fox Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 67.  
= *Acmæa? papillata*.
3630. **Cardinia? costata** (J. Morris). Cotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 692, Atlas, pl. 4,  
figs. 8a-c.
3672. **Cardinia? cuneata** Dana. Cotype  
Carboniferous. Wollongong Point, Illawarra, New So  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 692, Atlas, pl.  
figs. 6-6d.



8174. **Cardinia præcisa** White. Holotype.  
Jurassic. Near Lower Canyon of Yellowstone River,  
Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 149, pl. 37, figs. 7a, 7b.
3648. **Cardinia ? recta** Dana. Holotype.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 691, Atlas, pl. 4,  
fig. 5.
23050. **Cardiniopsis unioides** Stanton. Cotypes.  
Knoxville (Cret.). Three miles northwest of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 55, pl. 7, fig. 5; pl. 8, fig. 1; pl. 9, fig. 1; pl. 10, fig. 1.
30201. **Cardioceras dubium** Hyatt. Cotypes.  
Jurassic. Texas Ranch, Calaveras County, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 420.
14400. **Cardiola ? filicostata** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 251, pl. 22, figs.  
4, 4a.
14180. **Cardiomorpha missouriensis** Shumard. Plesiotypes.  
Lower Carboniferous. Eberhardt Mills, White Pine Dis-  
trict, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 277, pl. 6, figs. 1, 2.
164592. **Cardita (Carditamera) catharia** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1416, pl. 56, fig. 1.
9847. **Cardita eminula** Conrad. Holotype.  
Washita ? (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 150, pl. 6, fig. 8.
115668. **Cardita (Carditamera) guppyi** Dall. Holotype.  
Pliocene. Matura, Trinidad.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1413, pl. 56, fig. 3.
13405. **Cardita planicosta** (Lamarck). Plesiotypes.  
Eocene. Albany, Willamette Valley, Oregon.  
White, Bull. No. 18, U. S. Geol. Surv., 1885, pp. 7-9, pl. 1, figs.  
1-3.



9900. **Cardita planicosta** (Lamarck). Plesiotypes.  
Eocene. Arroyo las Minas, between Eagle Pass and Leon,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 161, pl. 19, figs. 2a, 2b.
109281. **Cardita (Carditamera) prestoni** Dall. Holotype.  
Miocene. Prestons Sink, near Waldo, Alachua County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1415, pl. 53, fig. 14.
135125. **Cardita (Carditamera) recta** (Conrad) var.? Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 189, pl. 11, fig. 4.  
= *Cardita (Carditamera) tegea*.
115669. **Cardita scabricostata** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 293,  
pl. 18, fig. 10.
164549. **Cardita serricosta** Heilprin. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
pl. 38, fig. 9.  
= *Venericardia serricosta*.
3502. **Cardita subtenta** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas, pl. 18,  
figs. 12, 12a.
9828. **Cardita subtetrica** Conrad. Holotype.  
Cretaceous? Rio Bravo del Norte, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 164, pl. 21, fig. 5.
135125. **Cardita (Carditamera) tegea** Dall. Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1412.  
See *Cardita (Carditamera) recta* var.?
164590. **Cardita (Carditamera) vauhani** Dall. Holotype.  
Miocene. Jackson Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1414, pl. 56, fig. 10.
11610. **Carditamera arata** Conrad. Plesioty  
11611. Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 57, pl. 9, 1  
5, 6.



114759. **Cardium acrocome** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1081, pl. 48, fig. 2.
157549. **Cardium (Trigoniocardia) alicula** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1103, pl. 40, fig. 12; pl. 48, fig. 5.
113800. **Cardium (Trigoniocardia) aminense** Dall. Holotype.  
Oligocene. Potrero, Rio Amina, Santo Domingo.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1104, pl. 48, fig. 11.
107384. **Cardium (Trigoniocardia) apateticum** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1105, pl. 48, fig. 6.
157456. **Cardium (Fragum) arestum** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1102, pl. 40, fig. 10.
115667. **Cardium (Trachycardium) var.? bowdenense** Dall. Cotypes.  
Bowden Marl (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1087.
30232. **Cardium (Granocardium) budaense** Shattuck. Cotypes.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 25, pl. 13,  
figs. 2-4.
114762. **Cardium (Papyridea) bulbosum** Dall. Holotype.  
Oligocene. Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1109, pl. 48, fig. 20.
114770. **Cardium (Fragum) burnsii** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1101, pl. 48, fig. 15.
115666. **Cardium castum** Guppy. Holotype.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 582,  
pl. 26, fig. 4.
114757. **Cardium (Trachycardium) cestum** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1083, pl. 48, fig. 11.



114765. *Cardium* (*Cerastoderma*) *chipolanum* Dall. Holotype.  
Oligocene. Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1098, pl. 40, fig. 8.
114769. *Cardium* (*Lævicardium*) *compressum* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1109, pl. 48, fig. 21.
9882. *Cardium congestum* Conrad. Cotypes.  
Washita? (Lower Cret.). Rio San Pedro, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 149, pl. 6, figs. 5a-d.
111595. *Cardium* (*Cerastoderma*) *craticuloides* (Conrad).  
Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 66, pl. 10,  
figs. 16-19.
107393. *Cardium ctenolium* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1081, pl. 40, fig. 13.
7855. *Cardium curtum* (Meek and Hayden). Plesiotypes.  
Montana (Cret.). Chalk Creek, near Uptown, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 151,  
pl. 15, fig. 3.
1917. *Cardium* (*Hemicardium*?) *curtum* Meek and Hayden.  
Holotype.  
Montana (Cret.). Head of Gros Ventres River, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1861, p. 442.
135123. *Cardium dalli* Heilprin. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Heilprin, Trans. Wagner Free Inst. Sci. Phila., I, 1887, p. 131,  
pl. 16a, fig. 70.
157525. *Cardium* (*Trachycardium*) *delphicum* Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1084,  
pl. 48, fig. 18.
113688. *Cardium* (*Trachycardium*) *dominicanum* Dall. Holotype.  
Oligocene. Near Gatun, Panama Canal.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1082,  
pl. 48, fig. 16.
107383. *Cardium* (*Cerastoderma*) *druidicum* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1094,  
pl. 40, fig. 7.



9868. *Cardium* (*Protocardia*) *filosum* Conrad. Holotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. 2, 1857,  
p. 150, pl. 6, figs. 7a, 7b.
135241. *Cardium* (*Fragum*) *gatunense* Dall. Cotypes.  
Eocene. Gatun, Isthmus of Darien.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1100.
7905. *Cardium* ? *kansasense* Meek. Holotype and paratypes.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 307;  
Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 170, pl. 2, figs.  
14a-d.
145861. *Cardium* (*Cerastoderma*) *leptopleura* (Conrad) var ?  
145933. Plesiotypes.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1095.
1834. *Cardium* *linteum* Conrad. Holotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 320, pl. 2, fig. 1.  
=*Cardium*. (*Lævicardium*) *linteum*.
135881. *Cardium* (*Trachycardium*) *malacum* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1087, pl. 48, fig. 4.
115665. *Cardium* (*Trigoniocardia*) *maturense* Dall. Holotype.  
Pliocene. Matura, Trinidad, West Indies.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1105, pl. 48, fig. 7.
9860. *Cardium* *mediale* Conrad. Holotype.  
Lower Cretaceous. Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, pt. 2, 1857.  
p. 149, pl. 4, figs. 4a, 4b.
1864. *Cardium* *modestum* Conrad. Holotype.  
Miocene. San Diego, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 322, pl. 3, fig. 15. (See Dall, Trans. Wagner Free  
Inst. Sci. Phila., III, Pt. V, 1900, p. 1092.)
509. *Cardium* *multiradiatum* Gabb. Holotype.  
Ripley (Cret.). Eufaula, Alabama.  
Gabb, Journ. Acad. Nat. Sci. Phila., IV, 2d ser., 1860, p. 395,  
pl. 68, fig. 29.  
[Not *Cardium multiradiatum* Sowerby. T. W. Stanton.]  
=*Cardium alabamense*.



9858. **Cardium (Protocardia) multistriatum** (Shumard). Plesiotypes.  
Washita? (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 149, pl. 6, figs. 4a-c..
157535. **Cardium (Trachycardium) oedaliu** Dall. Cotypes.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1088.
107390. **Cardium (Cerastoderma) pansatru** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1093, pl. 40, fig. 14.
114647. **Cardium (Trachycardium) parile** Dall. Holotype.  
Oligocene. Alum Bluff, Chipola River, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1086, pl. 48, fig. 17.
7832. **Cardium pauperculu** Meek. Cotypes.  
Fort Benton (Cret.). Twenty miles west of Fort Bridger,  
Wyoming.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 306.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877  
(1879), p. 291, pl. 9, fig. 3a.
22880. **Cardium pauperculu** Meek. Plesiotypes.  
22881. Colorado (Cret.). Huerfano Park, Colorado; Bear River  
22882. City, Wyoming, and Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 99, pl. 22, figs.  
9-12.  
See *Cardium subcurtum*.
1949. **Cardium pertenu** Meek and Hayden. Holotype.  
Montana (Cret.). Deer Creek, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 442.  
= *Protocardia (Leptocardia) pertenuis*.
157570. **Cardium (Cerastoderma) phlyctaena** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1097, pl. 48, fig. 13.
136748. **Cardium (Trachycardium) precursor** Dall. Holotype.  
Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1086, pl. 48, fig. 10.
114768. **Cardium propeciliare** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1080, pl. 48, fig. 12.



7897. **Cardium (Protocardia) salinaense** Meek. Cotypes.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 306.
12394. **Cardium scitulum** Meek. Holotype.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 40.  
= *Protocardia scitula*.
114767. **Cardium (Trigoniocardia) simrothi** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1104, pl. 48, fig. 8.
190. **Cardium speciosum** Meek and Hayden. Holotype and para-  
types.  
Fox Hills (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 274.
190. **Cardium (Criocardium) speciosum** (Meek and Hayden).  
Holotype and paratype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 169, pl. 37,  
figs. 4a-c.
8049. **Cardium (Ethmocardium) speciosum** (Meek and Hayden).  
Plesiotypes.  
Fox Hills (Cret.). Nine miles west of Greeley, Colorado.  
White, Proc. U. S. Nat. Mus., II, 1879, pp. 291, 292.
157547. **Cardium (Papyridea) spinosum turtoni** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1108.
12448. **Cardium subcurtum** Meek. Cotypes.  
Colorado (Cret.). Chalk Hill, near Coalville, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 152,  
pl. 15, fig. 3a.  
= *Cardium pauperculum*.
146223. **Cardium (Cerastoderma) tæniopleura** Dall. Cotypes.  
Miocene. Suffolk, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1095, pl. 49, figs. 1, 2.
135879. **Cardium (Cerastoderma) taphrium** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1098, pl. 40, fig. 9.



9884. **Cardium (Protocardia) texanum** Conrad. Holotype.  
Washita (Lower Cret.). Between El Paso and Frontera,  
Texas.  
Conrad, Rept. U. S. Mexican Bound Surv., Emory, I, Pt. 2, 1857,  
p. 150, pl. 6, figs. 6a-c.
30233. **Cardium (Protocardia) texanum** Conrad. Plesiotypes.  
Buda (Low. Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 25, pl. 13,  
figs. 5-7.
8060. **Cardium trite** White. Cotypes.  
Colorado (Cret.). Head of Waterpocket Canyon, South-  
ern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 291, pl. 5, fig. 4b.
114764. **Cardium (Trachycardium) virile** Dall. Holotype.  
Oligocene. Near Bailey Ferry, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1086, pl. 48, fig. 1.
113819. **Cardium (Cerastoderma) waltonianum** Dall. Holotype.  
Oligocene (?). Near Argyle Post Office, Walton County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1093, pl. 48, fig. 19.
157552. **Cardium (Trigoniocardia) wilcoxi** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1106, pl. 48, fig. 9.
113843. **Caricella claibornensis** Harris. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Harris, Bull. Amer. Pal., I, 1875, p. 49.
111814. **Caricella podagrina** Dall. Cotypes.  
Eocene. Garland Creek, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 86;  
Ibidem, Pt. II, 1892, p. 228, pl. 20, fig. 9 (as Scaphella (Cari-  
cella) podagrina).
107138. **Carinaria caperata** Guppy. Holotype.  
Upper Oligocene. Ally Creek, Naparima, Trinidad, West  
Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 318, pl. 27, fig. 14.
45736. **Carinaropsis acuta** Ulrich and Scofield. Cotypes.  
45737. Black River (Ord.). Cannon Falls and near Fountain,  
Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 928, pl. 62, figs. 6-9.



45738. *Carinaropsis cunulæ* Hall. Plesiotypes.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 927, pl. 62, figs. 10-13.
45739. *Carinaropsis cymbula* Hall. Plesiotypes.  
Trenton (Ord.). Near Danville, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 927, pl. 62, figs. 1-4.
45740. *Carinaropsis explanata* Ulrich. Holotype.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 929, pl. 62, fig. 5.
45741. *Carinaropsis minima* Ulrich and Scofield. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 929, pl. 62, fig. 19.
45742. *Carinaropsis phalera* Sardeson. Plesiotypes.  
45743. Black River (Ord.). St. Paul and Chatfield, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 928, pl. 62, figs. 14-18.
12542. *Carinifex (Vorticifex) binneyi* Meek. Cotypes.  
Tertiary. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 187, pl. 17, figs. 11, a.
12544. *Carinifex (Vorticifex) tryoni* Meek. Cotypes.  
Tertiary. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 188, pl. 17, figs. 10a, b.
13416. *Carinifex (Vorticifex) tryoni concava* Meek. Cotypes.  
Tertiary. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 189, pl. 17, fig. 10c.
135126. *Carolia (Wakullina) floridana* Dall. Cotypes.  
154336. Oligocene. Deep Creek, near Sopchoppy River, Wakulla County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 21; Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 777, pl. 24, figs. 5, 6, 6b, 7, 7b.
154335. *Carolia Carolia jamaicensis* Dall. Holotype.  
Eocene? Cambridge, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 776, pl. 33, fig. 21.
40578. *Carpomanon stellatum-sulcatum* Roemer. Plesiotypes.  
40579. Brownsport Sil. Hardin County, Tennessee; and Marion County, Kentucky.  
Rau, Palaeontographica, XL, 1894, p. 325, pl. 12, figs. 10, 11.



39907. **Caryocrinites globosus** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
39905. **Caryocrinites granulatus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
39906. **Caryocrinites hexagonus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
39904. **Caryocrinites insculptus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
157509. **Caryophyllia arnoldi** Vaughan. Holotype.  
Pleistocene. San Pedro Hill, San Pedro, California.  
Vaughan in Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 86,  
pl. 3, figs. 4, 4a.
164737. **Caryophyllia californica** Vaughan. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Vaughan in Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 87,  
pl. 3, figs. 2, 2a.
158213. **Caryophyllia dalli** Vaughan. Holotype.  
Jacksonian (Eocene). Montgomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 110, pl. 9,  
figs. 2-2c.
8083. **Caryophyllia egeria** White. Cotypes.  
Montana (Cret.). Valley of Sage Creek, Northwestern  
Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 275, pl. 6, figs. 7a, 7b.
8084. **Caryophyllia johannis** White. Cotypes.  
Montana (Cret.). Cimarron, New Mexico.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 274, pl. 6, figs. 6a, 6b.
164736. **Caryophyllia pedroënsis** Vaughan. Holotype.  
Pleistocene. San Pedro, California.  
Vaughan in Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 87,  
pl. 3, figs. 3, 3a.
158214. **Caryophyllia texana** Vaughan. Paratype.  
Lower Claibornian (Eocene). San Augustine, Texas.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 111.
46548. **Caryospongia juglans nuxmoschata** Hall. Plesiotype.  
Waldron (Sil.). Waldron, Indiana.  
Rauff, Palaeontographica, XL, 1894, p. 310, pl. 11, fig. 6.



9901. **Cassidula alveata** Conrad. Plesiotype.  
Tertiary. Western Texas.  
Conrad, Rept. U. S.-Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 163, pl. 19, figs. 9a-b.
21890. **Cassidulus porrectus** Clark. Holotype.  
Ripley (Upper Cret.). Eufaula, Alabama.  
Clark, Johns Hopkins Univ. Circ., No. 87, 1891, p. 76; Bull. No. 97, U. S. Geol. Surv., 1893, p. 72, pl. 33, figs. 1a-b; pl. 34, figs. 1a-b; pl. 35, figs. 1a-1d.
20268. **Cassidulus stantoni** Clark. Holotype.  
Colorado (Upper Cret.). Muddy Creek, Huerfano Park, Colorado.  
Clark, Johns Hopkins Univ. Circ., No. 87, 1891, p. 76; Bull. No. 97, U. S. Geol. Surv., 1893, p. 73, pl. 35, figs. 2a-d.
20264. **Cassidulus subconicus** Clark. Holotype.  
Ripley (Upper Cret.). Dumas, Mississippi.  
Clark, Johns Hopkins Univ. Circ., No. 87, 1891, p. 76; Bull. No. 97, U. S. Geol. Surv., 1893, p. 71, pl. 32, figs. 1a-1k.
20264. **Cassidulus subquadratus** Conrad. Plesiotype.  
Ripley (Upper Cret.). Holly Springs, Mississippi.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 70, pl. 31, figs. 1a-h.
8633. **Cassiope whitfieldi** White. Cotypes.  
Colorado (Cret.). Head of Le Verken Creek, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874, p. 27; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 196, pl. 18, fig. 1a.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 132, pl. 29, fig. 1.  
= *Glauconia coalvillensis*.
9058. **Cassiopella turricula** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 97, pl. 27, figs. 3a-d, f-g; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 464, pl. 23, figs. 25-29.
- Cassis* (Phalium) *aldrichi* Dall. See *Phalium aldrichi*.
- Cassis* (Phalium) *globosum* Dall. See *Phalium globosum*.
115504. **Cassis monilifera** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 287, pl. 17, fig. 8.
115505. **Cassis reclusa** Guppy. Cotypes.  
Miocene. Jamaica.  
Guppy, Geol. Mag., Dec. II, I, 1874, p. 434.
39911. **Catillocrinites tennesseæ** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.



2210. **Catopygus pusillus** Clark. Cotypes.  
Upper Cretaceous. Wordills, Monmouth County, New  
Jersey.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, p. 76; Bull. No.  
97, U. S. Geol. Surv., 1893, p. 65, pl. 27, figs. 3a-3d.
43279. **Ceramophylla frondosa** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
I, 1893, p. 331, pl. 28, figs. 3-7.
43280. **Ceramopora imbricata** Hall. Plesiotypes and figured sec-  
tions.  
Osgood (Sil.). Osgood, Indiana.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 463, pl. 39, figs. 1-1b.
43225. **Ceramoporella distincta** Ulrich. Cotypes and figured sec-  
tions.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 464, pl. 39, figs. 6, 6a.
43222. **Ceramoporella distincta** Ulrich. Plesiotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 328, pl. 28, fig. 13.
43227. **Ceramoporella granulosa** Ulrich. Figured sections of  
holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 466, pl. 41, figs. 2, 2a.
43223. **Ceramoporella inclusa** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 329, pl. 28, figs. 8-11.
43226. **Ceramoporella interporosa** Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 330, pl. 28, fig. 12.
43224. **Ceramoporella ? ohioensis** Nicholson. Plesiotype and figured  
sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 466, pl. 39, figs. 2, 2a.
20119. **Ceratia nexilia** White. Cotypes.  
Chico (Cret.). Near Pence's Ranch, Butte County, Cali-  
fornia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 21, pl. 3, figs. 13, 14.
14996. **Ceratiocaris beecheri** Clarke. Holotype.  
Naples (Dev.). Cashaqua Creek, Livingston County, New  
York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 44, pl. 2, fig. 1.



27128. **Ceratiocaris (Colpocaris) bradleyi** Meek. Cotypes.  
Waverly (Miss.). Near Danville, Kentucky.  
Meek, Geol. Surv. Ohio, II, 1875, p. 318, pl. 18, figs. 6a-6e.  
= *Colpocaris bradleyi*.
27127. **Ceratiocaris (Colpocaris) elytroides** Meek. Cotypes.  
Waverly (Miss.). Near Danville, Kentucky.  
Meek, Geol. Surv. Ohio, II, 1875, p. 319, pl. 18, figs. 5a, 5b.  
= *Colpocaris elytroides*.
27129. **Ceratiocaris (Solenocaris) strigata** Meek. Cotypes.  
Waverly (Miss.). Near Danville, Kentucky.  
Meek, Geol. Surv. Ohio, II, 1875, p. 321, pl. 18, figs. 4a-4c.  
= *Strigocaris strigata*.
41506. **Ceratopsis chambersi** (Miller). Plesiotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 676, pl. 46, figs. 19-22.
41335. **Ceratopsis chambersi robusta** Ulrich. Holotype.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 677, text figs. 50 a, b.
41500. **Ceratopsis intermedia** Ulrich. Cotypes.  
Trenton (Ord.). Bank Lick Creek, near Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 676.
25695. **Ceraurus pleurexanthemus** Green. Plastotype.  
Ordovician. Near Newport, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 84. Cast No. 33.
115555. **Cercomya ledæformis** Guppy. Holotype.  
Oligocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc., London, XXII, 1866, p. 581, pl. 26, fig. 1.  
= *Leda guppyi*.
113377. **Cerithidea scalata** Heilprin. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Heilprin, Trans. Wagner Free Inst. Sci. Phila., I, 1887, p. 132, pl. 16b, fig. 71.  
= *Potamides (Pyeazisinus) scalatus*.
293. **Cerithiopsis moreauensis** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 335, pl. 31, fig. 4; p. 336, text fig. 38.  
See *Turritella moreauensis*.



113325. **Cerithiopsis scariphus** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 269,  
pl. 22, fig. 5.
113324. **Cerithiopsis tubercularis floridana** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 269.
13408. **Cerithium billingsi** White. Cotypes.  
Chico (Cret.). Todos Santos Bay, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1885, p. 13, pl. 5, figs. 3-6.
113354. **Cerithium burnsii** Dall. Holotype.  
Miocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 280,  
pl. 14, fig. 12.
113363. **Cerithium callisoma** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 282,  
pl. 14, fig. 8.
113348. **Cerithium caloosaense** Dall. Cotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 279,  
pl. 15, figs. 9, 11.
113349. **Cerithium caloosaense heilprini** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 279,  
pl. 15, fig. 11b.
113372. **Cerithium chipolanum** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 285,  
pl. 22, fig. 7.
113368. **Cerithium coccodes** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 284,  
pl. 22, fig. 6.
4790. **Cerithium cymatophorum** Dall. Holotype.  
Miocene. Penjinsk Gulf, Siberia.  
Dall, Proc. U. S. Nat. Mus., XVI, 1893, p. 475, pl. 56, fig. .



113356. *Cerithium floridanum* Mörch. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 282,  
pl. 14, fig. 10.
115746. *Cerethium georgianum* Lyell and Sowerby. Plesiotype.  
Miocene. Blue Springs, Flint River, Georgia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 278.
113364. *Cerithium glaphyrea* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 283,  
pl. 14, fig. 4.
113366. *Cerithium glaphyrea litharium* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 284,  
pl. 14, fig. 9.
113351. *Cerithium ocalanum* Dall. Holotype.  
Upper Eocene. Martin Station, Hernando County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 279.
23079. *Cerithium paskentaensis* Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 71,  
pl. 13, figs. 5, 6.
113357. *Cerithium platynema* Dall. Holotype.  
Upper Eocene. Jacksonboro, Scriven County, Georgia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 281,  
pl. 14, fig. 11.
135156. *Cerethium serratoides* Aldrich. Holotype.  
Eocene. Red Bluff, Wayne County, Mississippi.  
Aldrich, The Nautilus, Vol. VII, No. 9, 1894, p. 99, pl. 4, fig. 5.
23080. *Cerithium strigosum* Stanton. Holotype.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 71,  
pl. 13, fig. 7.
13409. *Cerithium totium-sanctorum* White. Cotypes.  
Chico (Cret.). Todos Santos Bay, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1885, p. 13, pl. 5, figs.  
12, 13.



90969. **Cerithium vinctum** Whitfield. Plesiotypes.  
Chickesawan (Eocene). Lisbon, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 285,  
pl. 22, fig. 9.
25580. **Ceuthorhynchus degravatus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, Western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 132, pl. 11, fig. 12.
25549. **Ceuthorhynchus evinctus** Scudder. Holotype.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 130, pl. 11, fig. 13.
46109. **Chænocardia ovata** Meek and Worthen. Plastotype.  
Coal Measures. Grundy County, Illinois.  
Meek and Worthen, Geol. Surv. Ill., v, 1873, p. 586, pl. 27, figs.  
5 a, b.
46170. **Chænodomus typicalis** Ulrich. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 477, fig. 5.  
= *Cymatonota typicalis*.
1018. **Chænomya cooperi** (Meek and Hayden). Holotype.  
Upper Carboniferous. Near Helena, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 44, pl. 2, figs. 2a, 2b.  
See *Allorisma?* *cooperi*, and *Panopæa cooperi*.
1019. **Chænomya leavenworthensis** (Meek and Hayden).  
Cotypes.  
Upper Carboniferous. Leavenworth, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 43, pl. 2, figs. 1a, 1b.  
See *Allorisma?* *leavenworthana*.
6609. **Chænomya leavenworthensis** (Meek and Hayden).  
Plesiotypes.  
Upper Carboniferous. Rock Bluff, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 216,  
pl. 2, fig. 9.
6809. **Chænomya minehaha** (Swallow). Plesiotypes.  
Upper Carboniferous. Plattsmouth, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 217,  
pl. 2, figs. 13a-13b.
43694. **Chætetes compressus** Ulrich. Cotypes and figured section  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 27,  
figs. 25-25b.  
= *Peronopora compressa*.



3666. **Chætetes crinita** Lonsdale. Plesiotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 711, Atlas, pl. 11,  
fig. 6.
8080. **Chætetes ? demissus** White. Cotype.  
Fox Hills (Cret.). Six miles south of Fort Collins, Colo-  
rado.  
White, Bull. U. S. Geol. & Geogr. Surv. Terr., V, 1879, p. 220;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1878 (1883),  
p. 7, pl. 21, fig. 14a.
43653. **Chætetes elegans** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 130, pl. 12,  
figs. 12, 12a.  
= *Discotrypa elegans*.
3620. **Chætetes gracilis** Dana. Holotype.  
Carboniferous. Wollongong and Black Head, Illawarra,  
New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 712, Atlas, pl. 11,  
figs. 10a-c.
43669. **Chætetes granuliferus** Ulrich. Cotypes.  
Trenton (Ord.). Frankfort, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 128, pl. 12,  
figs. 9-9b.  
= *Homotrypella granulifera*.
43719. **Chætetes irregularis** Ulrich. Cotypes.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 129, pl. 12,  
figs. 10-10b.  
= *Stigmatella irregularis*.
8465. **Chætetes milleporaceus** (Troost). Plesiotype.  
Upper Carboniferous. Virgin Range, southwest of St.  
George, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 98, pl. 6, fig. 2a.
9211. **Chætetes muscatinensis** White. Cotypes.  
Hamilton (Dev.). Near Muscatine, Iowa.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 27.
3656. **Chætetes ovata** Lonsdale. Plesiotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 712, Atlas, pl. 11,  
figs. 9-9b.



43683. **Chætetes subglobosus** Ulrich. Cotypes and figured sections.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 129, pl. 12,  
figs. 11-11b.  
= *Monotrypa subglobosa*.
3619. **Chætetes tasmaniensis** Lonsdale. Plesiotypes.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 711, Atlas, pl. 11,  
figs. 7, 7a, 8, 8a.
43236. **Chætetes venustus** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 93, pl. 4,  
figs. 7, 7a.  
= *Crepipora venusta*.
44084. **Chainodictyon laxum** Foerste. Plastotypes.  
Coal Measures. Near Newark, Ohio.  
Foerste, Bull. Sci. Lab. Denison Univ., II, 1887, p. 81, pl. 7,  
figs. 8a-c.
44085. **Chainodictyon laxum minor** Ulrich. Plastotype.  
Lower Coal Measures. Seville, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 640, pl. 62, figs. 3, 3a.
109250. **Chama caloosana** Dall. Cotypes.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1402, pl. 54, figs. 2, 5.
114725. **Chama chipolana** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1398, pl. 56, figs. 19, 20.
111615. **Chama congregata** Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 65, pl. 9,  
figs. 14-18.
114724. **Chama draconis** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1399, pl. 56, figs. 17, 18.
115537. **Chama involuta** Guppy. Cotypes.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 436 pl. 17, fig  
5a-5c.



109251. **Chama lyelli** Dall. Holotype.  
Oligocene. Jacksonboro, Georgia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1399, pl. 54, fig. 3.
109248. **Chama tampaensis** Dall. Holotype.  
Oligocene. Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1398, pl. 54, fig. 6.
109249. **Chama willcoxii** Dall. Cotypes.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl.  
41, figs. 5, 6, 7; Pt. VI, 1903, p. 1401.
24561. **Chariocephalus tumifrons** Hall and Whitfield. Cotypes.  
Upper Cambrian. West side of Pogonip Mountain, White  
Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 224, pl. 2, figs. 38, 39.
24643. **Chariocephalus (?) tumifrons** Hall and Whitfield. Plesio-  
types.  
Upper Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 61, pl. 10, fig. 16.
23115. **Charydrobia stachei** White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 58, pl. 10, figs. 7-9.
43277. **Cheilotrypa hispida** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 50, pl. 3,  
figs. 6, 6a-d.
43278. **Cheilotrypa ostiolata** (Hall). Plesiotypes and figured sec-  
tions.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, pl. 3, figs.  
7, 7a.
38149. **Cheliphlebia carbonaria** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 328, pl. 30,  
fig. 8; Foss. Insects N. America, 1, 1890, p. 292, pl. 16, fig. 8.
263. **Chemnitzia cerithiformis** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 187, p. 339, pl. 32, figs.  
10a, 10b.  
See *Scalaria cerethiformis*.



22916. **Chemnitzia ? coalvillensis** (Meek). Plesiotypes.  
Colorado (Cret.). Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 141, pl. 30,  
figs. 10, 11.  
Chetetes. See Chætetes.
44110. **Chiloporella flabellata** (Ulrich). Plesiotype and figured  
sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 381, pl. 39, figs. 5-5b.  
See *Fistulipora flabellata*.
109238. **Chione (Lirophora) ballista** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1295, pl. 55, fig. 23.
114755. **Chione (Lirophora) burnsii** (Dall). Cotypes.  
Oligocene. Alum Bluff and Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1198,  
pl. 42, figs. 4, 5a, 11; Pt. VI, 1903, p. 1294.
114739. **Chione chipolana** Dall. Holotype.  
Chipola (Oligocene). Chipola, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1290, pl. 55, fig. 20.
136738. **Chione (? Chamelea) craspedonia** Dall. Holotype.  
Vicksburgian (Oligocene). Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1300, pl. 55, fig. 2.
109237. **Chione erosa** Dall. Cotypes.  
Miocene. Jackson Bluff, sixteen miles southwest of  
Tallahassee, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1290, pl. 55, figs. 5, 8.
135887. **Chione (Lirophora) glyptocyma** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1296, pl. 55, fig. 21.
135668. **Chione (Lirophora) hendersonii** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1295, pl. 55, fig. 22.
112361. **Chione (Lirophora) latilirata** (Conrad). Plesiotype.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1298.  
See *Venus latilirata*.



109239. *Chione* (*Chamelea*) *nuciformis* (Heilprin). Plesiotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1300, pl. 55, fig. 9.
109229. *Chione* (*Chamelea*) *rhodia* Dall. Holotype.  
Oligocene. Ballast Point, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1301, pl. 55, fig. 10.
109240. *Chione* (*Chamelea*) *spada* Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1301, pl. 55, fig. 13.
114848. *Chione* (*Lirophora*) *ulocyma* (Dall). Holotype.  
Miocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1296.  
See *Venus* (*Anaitis*) *ulocyma*.
155311. *Chione* (*Lirophora*) *victoria* Dall. Holotype.  
Lower Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1293, pl. 55, fig. 17.
- 115720a. *Chione* (*Lirophora*) *xesta* Dall. Holotype.  
Miocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1297, pl. 55, fig. 18.
103753. *Chiton* *burnsii* Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 50, figs. 5, 6.
112000. *Chiton* *Trachyodon* *eocenensis* Conrad. Plesiotypes.  
Chattahoochee Eocene. Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 433.
358. *Chlamys* *nebrascensis* Meek and Hayden. Cotypes.  
Montana Cret. . Yellowstone River, near Miles City.  
Montana  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1877, p. 25, pl. 16,  
figs. 10, 11.  
See *Pecten* *nebrascensis*.
112572. *Chlorostoma* *Omphalius* *exoletum* Conrad. Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 388, pl. 17, figs. 1, 2.



113005. **Chlorostoma** (*exoletum* var?) *limatum* Dall. Cotypes.  
 113006. Miocene. Near Natural Well, Duplin County, North Carolina, and Alum Bluff, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 389.
30180. **Chondrodonta glabra** Stanton. Cotypes.  
 Glen Rose (Lower Cret.). Near Kerrville, Texas.  
 Stanton, Proc. U. S. Nat. Mus., XXIV, 1901, p. 306, pl. 26, figs. 1-3.
30181. **Chondrodonta munsoni** (Hill). Plesiotypes.  
 30182. Edwards (Lower Cret.). Nolands River at Belton, and Bartons Creek, near Austin, Texas.  
 Stanton, Proc. U. S. Nat. Mus., XXIV, 1901, p. 303, pl. 25, figs. 1-5.
- Chonetes* (sp. undet.) Owen 1852 = *Stropheodonta iowensis*.
13810. **Chonetes deflecta** Hall. Plesiotype.  
 Middle and Upper Devonian. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 124, pl. 2, figs. 8-8b.
13811. **Chonetes filistriata** Walcott. Cotypes.  
 Middle Devonian. Combs Peak, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 127, pl. 13, figs. 15, 15a.
35342. **Chonetes flemingi** Norwood and Pratten. Plesiotypes.  
 Upper Carboniferous. Near Grand River, Colorado.  
 Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 352, pl. 1, figs. 17, 18.
24366. **Chonetes freitasii** Rathbun. Cotypes.  
 Middle Devonian. Rio Maecuru, Brazil.  
 Rathbun, Proc. Boston Soc. Nat. Hist., XX, 1878, p. 18.
35343. **Chonetes geinitzianus** Waagen. Plesiotypes.  
 Weber (Upper Carb.). Leadville District, Colorado.  
 Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 355, pl. 1, figs. 19, 19a.
6997. **Chonetes glabra** Geinitz. Plesiotypes.  
 24530. Upper Carboniferous. Nebraska City, Nebraska.  
 Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 171, pl. 4, fig. 10; pl. 8, figs. 8a, 8b.
6541. **Chonetes granulifera** Owen. Plesiotypes.  
 6861. Upper Carboniferous. Nebraska City, Nebraska.  
 6990. Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 170, pl. 9, fig. 10; pl. 8, fig. 7.  
 See *Chonetes mucronata* and *C. variolata*.



17942. **Chonetes (?) iowensis** Owen. Holotype.  
Middle Devonian. Iowa River at Iowa City, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 584,  
pl. 3 A, fig. 7.  
=Stropheodonta iowensis.
- 14978.. **Chonetes lepida** Hall. Plesiotypes.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 32.
14237. **Chonetes loganensis** Hall and Whitfield. Holotype.  
Waverly (Miss.). Logan Canyon, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 253, pl. 4, fig. 9.—Girty, Mon. XXXII, Pt. II, U. S.  
Geol. Surv., 1899, p. 525, pl. 68, fig. 5a.
35165. **Chonetes loganensis** Hall and Whitfield. Plesiotypes.  
Madison (Miss.). West of Electric Peak, Yellowstone  
National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 525, pl.  
68, figs. 5b, 5c.
13809. **Chonetes macrostriata** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 126, pl. 2, fig. 13;  
pl. 13, figs. 14-14c.  
=Stropheodonta macrostriata.
8510. **Chonetes mesoloba** Norwood and Pratten. Plesiotypes.  
Upper Carboniferous. Confluence of White Mountain  
and Black rivers, Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 123, pl. 9, fig. 7a.
35344. **Chonetes mesolobus** Norwood and Pratten. Plesiotypes.  
Hermosa (Upper Carb.). Hermosa Creek, Durango Quad-  
rangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 357, pl. 1,  
figs. 20, 21, 22, 23.
1066. **Chonetes mucronata** Meek and Hayden. Cotypes.  
Upper Carboniferous. Near Fort Riley, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 262;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 22, pl. 1, figs. 5a-5e.  
=Chonetes granuliferus.
35164. **Chonetes ornatus** Shumard. Plesiotypes.  
Madison (Miss.). West of Electric Peak, Yellowstone  
National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 527, pl. 68,  
figs. 4a, 4b, 4c, 4d.



8498. **Chonetes platynota** White. Cotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 19; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 121, pl. 9, figs. 6a-6e.
24429. **Chonetes pusilla** Hall. Plesiotypes.  
Base of Upper Devonian. Near Fort Resolution, Great  
Slave Lake, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 93, pl. 13, figs. 2a-2d.
15062. **Chonetes variolata** d'Orbigny. Plesiotypes.  
Upper Carboniferous. Weston, Missouri.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 410, pl. 3, fig. 1a.  
= *Chonetes granuliferus*.
6948. **Chonetes verneuiliana** Norwood and Pratten. Plesiotypes.  
Upper Carboniferous. Four miles above mouth of Platte  
River, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p.  
170, pl. 1, figs. 10a, 10b.
666. **Chonetes verneuiliana utahensis** Meek. Cotypes.  
Upper Carboniferous. Near Humboldt Mountains,  
Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 348,  
pl. 2, figs. 2-2c.
8903. **Chonophyllum sedaliense** White. Holotype.  
Chouteau (Miss.). Sedalia, Missouri.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 157, pl. 39, fig. 3.
33800. **Chuararia circularis** Walcott. Cotypes.  
Chuar (Algonkian). Kwagunt Valley, Grand Canyon,  
Arizona.  
Walcott, Bull. No. 10, Geol. Soc. Amer., 1899, p. 234, pl. 27, figs.  
12, 13.
115393. **Cidaris anguillæ** Cotteau. Holotype.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 11,  
pl. 1, figs. 17, 18.
30184. **Cidaris californicus** Clark. Cotype.  
Jurassic. Taylorsville, California.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 36, pl. 6, figs. 1a-1c.
115400. **Cidaris clevei** Cotteau. Holotype.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 11,  
pl. 1, figs. 15, 16.



115415. **Cidaris loveni** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 10,  
pl. 1, figs. 11-14.
115399. **Cidaris melitensis** Wright. Plesiotypes.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, pl. 1,  
figs. 1-10.
30183. **Cidaris taylorensis** Clark. Cotype.  
Jurassic. Taylorsville, California.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 35, pl. 6, figs. 2 a, 2b.
8381. **Cidaris texanus**, Clark. Holotype.  
Washita (Lower Cret.). Bexar County, Texas.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, p. 75; Bull. No. 97,  
U. S. Geol. Surv., 1893, p. 36, pl. 7, figs. 1a-1e.
30077. **Cidaroblastus globosus** (Troost). Holotype.  
Mississippian. Bedford County, Tennessee.  
Hambach, Trans. St. Louis Acad. Sci., XIII, 1900, p. 30, pl. 3,  
fig. 4.
33080. **Cidaroblastus granulatus** (Roemer). Cotypes.  
Mississippian. Bedford County, Tennessee.  
Hambach, Trans. St. Louis Acad. Sci., XIII, 1903, p. 29, pl. 3,  
figs. 2, 3 (on plate as *C. granularis*).  
See *Granatocrinus cidariformis*.
291. **Cinulia (Oligoptycha) concinna** (Hall and Meek). Plesiotypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 284, pl. 31, figs.  
6 bis, a-b.  
See *Avalana subglobosa*.
11409. **Cladocora recrescens** Lonsdale. Plesiotype.  
Upper Oligocene. Jacksonboro, Georgia.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 138, pl. 15,  
figs. 2, 3.
45744. **Clathrospira conica** Ulrich and Scofield. Cotypes.  
45745. Black River (Ord.). Chatfield, and Goodhue County, Min-  
45746. nesota.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final. Rept., III, Pt.  
II, 1897, p. 1008, pl. 70, figs. 1-4.
45747. **Clathrospira convexa** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Calhoun County, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1007, pl. 69, fig. 51.



45748. **Clathrospira subconica** (Hall). Plesiotypes.  
 46051. Stones River (Ord.). Beloit, Wisconsin; Lebanon, Tennessee.  
 Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1006, pl. 69, figs. 47, 48; pl. 70, figs. 5, 6.
107142. **Clathurella amicta** Guppy. Holotype.  
 Oligocene. Vendryes, Jamaica, West Indies.  
 Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 305, pl. 27, fig. 12.
107086. **Clathurella vendryesiana** Dall. Holotype.  
 Oligocene. Vendryes, Jamaica, West Indies.  
 Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 306, pl. 27, fig. 1.
113381. **Clava caloosaënsis** Dall. Cotypes.  
 Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 291, pl. 14, fig. 3a.
114281. **Clava chipolana** Dall. Holotype.  
 Oligocene. Alum Bluff, Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 290, pl. 22, fig. 8.
35134. **Clavulites howardensis** Girty. Cotypes.  
 Burlingame (Upper Carb.). Howard, Kansas.  
 Girty, Proc. U. S. Nat. Mus., XXVII, 1904, p. 732, pl. 47, figs. 4-11.
- Cleidophorus. See Clidophorus.
107381. **Clementia grayi** Dall. Holotype.  
 Oligocene. Oak Grove, Santa Rosa County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 37, fig. 12; Pt. VI, 1903, p. 1236.
107106. **Clementia ? tæniosa** Guppy. Holotype.  
 Tertiary. Savaneta, Trinidad, West Indies.  
 Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 327, pl. 30, fig. 8.
38118. **Cleonus foersteri** Scudder. Holotype.  
 Florissant (Oligocene). Florissant, Colorado.  
 Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 97, pl. 11, fig. 4.
46110. **Clidophorus consuetus** Ulrich. Holotype.  
 Trenton (Ord.). Wykoff, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1892, p. 223, fig. 9; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 606, pl. 37, figs. 32, 33.
46111. **Clidophorus ellipticus** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 25, pl. 7, fig. 22.



46223. **Clidophorus major** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 25, pl. 7,  
fig. 23.  
=Lyrodesma major.
21703. **Clidophorus occidentalis** (Geinitz). Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 27, pl. 4, fig. 3.
7731. **Clinopistha radiata** (Hall). Plesiotypes.  
Upper Carboniferous. Illinois.  
White, Thirteenth Ann. Rept. Geol. Surv. Ind., 1884, p. 147, pl.  
31, figs. 6, 7.
46112. **Clionychia erecta** (Hall). Plesiotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 496, pl. 35, figs. 17, 18.
46113. **Clionychia excavata** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 651, pl. 51, figs. 4, 5.
- 46114 to 46116. **Clionychia lamellosa** (Hall). Plesiotypes.  
Stones River (Ord.). Mineral Point and Beloit, Wisconsin; Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 494, pl. 35, figs. 10-14.
46117. **Clionychia rhomboidea** Ulrich. Plastotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 97, pl. 7, figs. 1, 2; Geol. and Nat.  
Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 496, pl. 35,  
figs. 19, 20.
46118. **Clionychia subundata** Ulrich. Holotype.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 651, text fig.
46119. **Clionychia undata** (Emmons). Plesiotype.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 497, pl. 35, figs. 21, 22.
35197. **Cliothyris crassicardialis** (White). Plesiotype.  
Madison (Miss.). North of Owl Creek, Yellowstone  
National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 567, pl. 71,  
fig. 8a.
35198. **Cliothyris crassicardialis nana** Girty. Cotypes.  
Madison (Miss.). Crowfoot Ridge, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 569, pl. 71,  
fig. 9a.



35159. **Clisiophyllum teres** Girty. Cotypes.  
Madison (Miss.). Three Fork Peak, Gallatin Range,  
Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 614, pl. 67,  
figs. 2a, 2b, 2c, 2d.
20104. **Clisocolus cordatus** Whiteaves. Plesiotypes.  
Nanaimo (Cret.). Sucia Island, Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 41, pl. 6, figs. 8, 9.
20092. **Clisocolus dubius** (Gabb). Plesiotypes.  
Nanaimo (Cret.). Sucia Island, Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 41, pl. 6, figs. 5-7.
260. **Closteriscus tenuilineatus** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 308, pl. 19,  
figs. 10a, 10b, and 9c.
12522. **Clydonites lævidorsatus** (Hauer). Plesiotypes.  
Triassic. Buena Vista Canyon, north fork of Humboldt  
Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 109,  
pl. 10, fig. 7a.
115390. **Clypeaster antillarum** Cotteau. Holotype.  
Miocene. Porto Rico, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 15,  
pl. 2, figs. 1-3.
115375. **Clypeaster concavus** Cotteau. Holotype.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 16,  
pl. 2, figs. 4-8.
112657. **Cochliolepis striata** Stimpson. Plesiotypes.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 419, pl. 23, figs. 16, 17.
114691. **Codakia (Jagonia) chipolana** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1349, pl. 52, fig. 9.
114688. **Codakia (Jagonia) erosa** Dall. Holotype.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1348, pl. 52, fig. 7.
115113. **Codakia (Jagonia) magnoliana** Dall. Holotype.  
Upper Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1349, pl. 52, fig. 17.



135716. **Codakia (Jagonia) pertenera** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1347, pl. 51, fig. 4.
135713. **Codakia spinulosa** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1346, pl. 52, fig. 19.
135720. **Codakia (Jagonia) vendryesi** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1348, pl. 52, fig. 4.
39922. **Codonocrinites gracilis** Troost. Chirotype.  
Mississippian. Huntsville, Alabama.  
Troost, Proc. Amer. Assoc. Adv. Sci. II, 1850, p. 60.
25505. **Cœlidia wyomingensis** Scudder. Holotype.  
(Older Tertiary. Twin Creek, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890,  
p. 313, pl. 4, fig. 8.
45740. **Cœlocaulus neglectus** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1020, pl. 82, figs. 29-31.
45750. **Cœlocaulus oehlerti** Ulrich. Cotypes.  
Trenton (Ord.). Jo Daviess County, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1020, pl. 70, figs. 61-63.
44003. **Cœloconus granosus** Ulrich. Cotype.  
Chester (Miss.). Anna, Union County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 665, pl. 72, figs. 3a, 3b.
43335. **Cœloconus rhombicus** Ulrich. Cotypes and figured sections.  
St. Louis (Miss.). Fountain Creek, Monroe County,  
Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 664, pl. 72, figs. 4-4c.
35001. **Cœlocystis subglobosus** Hall. Plesiotypes.  
35155. Niagaran (Sil.). Chicago, Illinois.  
Schuchert, Amer. Geol., XXXII, 1903, p. 235; Smithsonian Misc.  
Coll., Quart., XLVII, 1904, pp. 247, 248, text figs. 36, 37.
18320. **Coleoloides typicalis** Walcott. Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1882, p. 37; Tenth Ann.  
Rept. U. S. Geol. Surv., 1881, p. 624, pl. 70, figs. 6, 6a.



14194. *Coleolus laevis* Walcott. Cotypes.  
White Pine Shale (Lower Carb.). Diamond Peak, Eureka  
District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 199, pl. 6, fig. 9.
17373. *Coleoprion minuta* Walcott. Cotypes.  
Upper Pogonip (Ord.). Lone Mountain and Pogonip  
Ridge, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 85, pl. 11, figs. 17,  
17a; pl. 12, fig. 21.
113001. *Collonia chipolana* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
387.
113002. *Collonia claibornensis* Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
388, pl. 22, fig. 26.
112996. *Collonia elegantula* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
386, pl. 19, figs. 3, 4.
113000. *Collonia radiata* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 387, pl. 19, figs. 6, 7, 8.
46120. *Colpomya constricta* Ulrich. Cotypes.  
Trenton (Ord.). Frankfort, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 659, pl. 52, figs. 17-19;  
Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 523, fig. 41.
46121. *Colpomya demissa* Ulrich. Holotype.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 524, pl. 36, figs. 21, 22.
115514. *Columbella ambigua* Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 288,  
pl. 16, fig. 8.  
= *Strombina ambigua*.
163749. *Columbella cosmia* Dall. Holotype.  
Pliocene. Sheil Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 58, fig. 2.



115515. *Columbella gradata* Guppy. Holotype.  
 115516. Miocene. Cumana, Venezuela, and Jamaica, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 288, pl. 16, fig. 10.  
*Strombina gradata*.
102558. *Columbella (Anachis) minima* Arnold. Holotype.  
 Pleistocene. San Pedro, California.  
 Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 237, pl. 9, fig. 8.
115520. *Columbella peculiaris* Guppy. Holotype.  
 Pliocene. Matura, Trinidad, British West Indies.  
 Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 411, pl. 18, fig. 20.  
*Aisopus stearnsii*.
113250. *Columbella (Anachis) styliola* Dall. Holotype.  
 Miocene. Cape Fear River, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 242, pl. 13, fig. 11.
2115. *Columna teres* (Meek and Hayden). Holotype.  
 Laramie (Cret.). Three miles below Fort Union, North Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 555, pl. 44, figs. 11a, 11b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 454, pl. 25, fig. 15.  
 See *Bulinus?* *teres*.
2113. *Columna vermicula* (Meek and Hayden). Holotype and paratypes.  
 Laramie (Cret.). Three miles below Fort Union, North Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 556, pl. 44, figs. 12, 12b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 454, pl. 25, fig. 16.  
 See *Bulinus?* *vermiculus*.
2114. *Columna vermicula contraria* Meek. Holotype.  
 Laramie (Cret.). Near Fort Union, North Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 557.
45402. *Columnaria halli* Nicholson. Plesiotype.  
 Stones River (Ord.). Two miles southwest of Columbia, Tennessee.  
 Hall and Ulrich, U. S. Geol. Surv., Bull. 20, 1892, illustration plate 10, fig. 1.
45401. *Columnaria thomii* Hall. Holotype.  
 Laramie and Laramie are given. Probably Richmond (Ord.), near El Paso, Texas.  
 Hall, Rept. U. S. Geol. Surv. Terr., IX, Pt. II, 1877, p. 555, pl. 44, fig. 10.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 454, pl. 25, fig. 15.  
 See *Bulinus?* *thomii*.



14552. **Combophyllum multiradiatum** Meek. Holotype.  
Base of Upper Devonian. Onion River, Mackenzie River  
Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 84, pl. 11, figs. 4, 4a.
20118. **Cominella lecontei** White. Cotypes.  
Chico (Cret.). Near Pences Ranch, Butte County, Cali-  
fornia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 22, pl. 4, figs. 4, 5.
40759. **Compsocrinus harrisi** (Miller). Plesiotype.  
Richmond (Ord.). Waynesville, Ohio.  
Miller, N. A. Geol. and Pal., 1889, p. 234, fig. 272.—Wachsmuth  
and Springer, N. A. Crinoidea Camerata, Mem. Mus. Comp.  
Zoöl., XXI, 1897, p. 517, pl. 21, figs. 8a, 8b.  
See *Glyptocrinus harrisi*.
40760. **Compsocrinus miamiensis** (Miller). Holotype.  
Richmond (Ord.). Waynesville, Ohio.  
Wachsmuth and Springer, N. A. Crinoidea Camerata, Mem. Mus.  
Comp. Zoöl., XXI, 1897, p. 518, pl. 21, fig. 7a.  
See *Glyptocrinus miamiensis*.
154354. **Congeria lamellata** Dall. Cotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
809, pl. 35, figs. 13, 14, 15.
25531. **Coniatus refractus** Scudder. Holotype.  
Older Tertiary. White River, Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 79, pl. 10, fig. 4.
13915. **Conocardium nevadensis** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv. 1884, p. 177, pl. 16, figs.  
4, 4a.
35157. **Conocardium pulchellum** White and Whitfield (?).  
Plesiotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yel-  
lowstone Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 571, pl.  
66, fig. 14a.
8539. **Conocardium semiplenum** White. Holotype.  
Lower Carboniferous. Below Ophir City, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th. Merid., IV. Pt. I, 1876,  
p. 94.  
[Named at end of description.]
24562. **Conocephalites (Pterocephalus) laticeps** Hall and Whit-  
C  
Upper Cambrian. West side of Pogonip Mountain,  
Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, 1  
1877, p. 221, pl. 2, figs. 4-7.



15442. **Conocephalites subcoronatus** Hall and Whitfield. Cotypes.  
Lower Cambrian. Ute Peak, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 327, pl. 2, fig. 1.  
= *Ptychoparia subcoronata*.
7861. **Conocoryphe (Ptychoparia) gallatinensis** Meek. Cotypes.  
7862. Middle Cambrian. Above Gallatin City, east side of Gallatin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 485.  
= *Ptychoparia oweni*.
8577. **Conocoryphe (Ptychoparia) kingii** Meek. Plesiotypes.  
14585. Middle Cambrian. Antelope Springs, House Range,  
15439. Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 20,  
pl. 1, fig. 4.—White, Rept. U. S. Geogr. Surv. W. 100th Merid.,  
IV, Pt. I, 1876, p. 40, pl. 2, figs. 2a-2c.—Walcott, Bull. No. 30,  
U. S. Geol. Surv., 1886, p. 193, pl. 27, figs. 4, 4a.
18431. **Conocoryphe reticulata** Walcott. Holotype.  
Lower Cambrian. Near Salem, Washington County, New York.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 649, pl. 95,  
figs. 6, 6a.
17453. **Conocoryphe trilineata** (Emmons). Plesiotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Amer. Journ. Sci., (3), XXXIV, 1887, p. 197, pl. 1, figs.  
7-7b.—Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 647, pl.  
95, figs. 5a-5e.  
= *Atops trilineatus*.
39023. **Conocrinites leæ** Troost. Chirotypes.  
Mississippian. White Creek Spring. Davidson County,  
Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
112113. **Conomitra staminea** Conrad. Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 94,  
pl. 4, fig. 2.
18443. **Conotreta rusti** Walcott. Cotypes.  
Trenton Ord. . Trenton Falls, New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1890, p. 365, figs. 1-4, on  
p. 366.
45751. **Conradella bellula** Ulrich. Holotype.  
Lorraine Ord. . Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pl.  
II, 1897, p. 61, pl. 7, figs. 23-25.



45752. **Conradella dyeri** (Hall). Plesiotypes.  
Richmond (Ord.). Butler County, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 909, pl. 67, figs. 30-33.
45753. **Conradella dyeri cellulosa** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 910, pl. 67, figs. 27-29.
45754. **Conradella elegans** (Miller). Plesiotypes.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 911, pl. 67, figs. 12-15.
45755. **Conradella fimbriata** Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 907, pl. 62, fig. 66; pl. 67, figs. 7-9.
45756. **Conradella grandis** Ulrich. Cotypes.  
Stones River (Ord.). Lebanon, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 908, pl. 62, fig. 67; pl. 67, figs. 16-18.
45757. **Conradella imbricata** (Meek and Worthen). Plesiotype.  
Trenton (Ord.). Alexander County, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 911, pl. 67, fig. 11.
45758. **Conradella obliqua** Ulrich and Scofield. Cotypes.  
45759. Black River (Ord.). Cannon Falls and St. Paul, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 906, pl. 67, figs. 1-6.
45760. **Conradella triangularis** Ulrich and Scofield. Cotypes.  
45761. Stones River (Ord.). Minneapolis, Minnesota; Dixon,  
45762. Illinois; Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 908, pl. 67, figs. 19-22.
44068. **Constellaria fischeri** Ulrich. Holotype and figured section.  
Trenton (Ord.). Near Winchester, Kentucky. (Mount Sterling, Kentucky, in error).  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 270, pl. 14, figs. 6-6c.
43808. **Constellaria florida** Ulrich. Cotypes and figured section.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 267, figs. 2-2f.



43648. *Constellaria florida emaciata* Ulrich and Bassler. Cotypes.  
Trenton (Ord.). Columbia, Tennessee.  
Ulrich and Bassler, in Hayes and Ulrich, U. S. Geol. Surv., Folio  
95, 1903, illustration sheet, fig. 30; Smithsonian Misc. Coll.,  
Quart., XLVII, 1904, p. 37.
43645. *Constellaria florida plana* Ulrich. Holotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 269, pl. 14,  
fig. 4.
43644. *Constellaria florida prominens* Ulrich. Holotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 269, pl. 14,  
fig. 3.
43643. *Constellaria limitaris* (Ulrich). Plesiotypes and figured  
sections.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 269, pl. 14,  
figs. 5, 5a.
43747. *Constellaria parva* Ulrich. Figured sections of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 424, pl. 34, figs. 1a, 1b.
43805. *Constellaria teres* Ulrich and Bassler. Cotypes.  
Trenton (Ord.). Columbia, Tennessee.  
Ulrich and Bassler in Hayes and Ulrich, U. S. Geol. Surv., Folio  
95, 1903, illustration sheet, fig. 31; Smithsonian Misc. Coll.,  
Quart., XLVII, 1904, p. 37.
43816. *Constellaria varia* Ulrich. Cotypes and figured sections.  
Trenton (Ord.). One and a half miles south of Cannon  
Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 311, pl. 21, figs. 1-7.
43852. *Conularia cambria* Walcott. Cotypes.  
Upper Cambrian. Pilot Knob, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 270, pl. 20, fig. 10.
43853. *Conularia crustula* White. Cotypes.  
Upper Carboniferous. Near Kansas City, Missouri.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 170, pl. 42, fig. 4a.
43854. *Conularia crustula* White. Plesiotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv., W. 100th Merid., III, Suppl.,  
1881, p. 28, pl. 3, figs. 4a, 4b.



3668. **Conularia inornata** Dana. Holotype.  
Carboniferous. Glendon on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 709, Atlas, pl. 10,  
fig. 8.
3669. **Conularia levigata** Morris. Plesiotypes.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 710, Atlas, pl. 10,  
figs. 9, 9a.
14425. **Conularia missouriensis**. (Swallow). Plesiotypes.  
Lower Carboniferous. Mokomoke Ridge, White Pine  
District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 264, pl. 23, fig. 4.
113985. **Conus chipolanus** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 42; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. IV, 1903, pl. 60, fig. 23.
115594. **Conus consobrinus** Sowerby. Plesiotypes.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 409, pl. 17, fig. 3.
64405. **Conus cruzianus** Dall. Holotype.  
Pliocene? Island Santa Cruz, West Indies.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 25,  
pl. 5, fig. 12.
113920. **Conus demiurgus** Dall. Cotypes.  
113922. Chipola (Oligocene). Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 43; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. IV, 1903, pl. 60, fig. 22.
115589. **Conus gracilissimus** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 288,  
pl. 16, fig. 4.
115587. **Conus granozonatus** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 287,  
pl. 16, fig. 5.
115588. **Conus interstinctus** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 287,  
pl. 16, fig. 3.



113980. **Conus isomitratus** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 43; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. IV, 1903, pl. 60, fig. 26.
113924. **Conus isomitratus sulculus** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 43.  
= *Conus sulculus*.
4780. **Conus okhotensis** Dall. Holotype.  
Miocene. Penjinsk Gulf, Siberia.  
Dall, Proc. U. S. Nat. Mus., XVI, 1893, p. 475, pl. 56, fig. 4.
112080. **Conus planiceps** Heilprin. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 25,  
pl. 11, figs. 5, 5a; Pt. II, 1892, p. 219.
115503. **Conus prototypus** Guppy. Holotype.  
Miocene. Saranetta, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 409, pl. 18,  
fig. 1; pl. 17, fig. 9.
115585. **Conus recognitus** Guppy. Cotypes.  
Miocene. Jamaica.  
Guppy, Proc. Sci. Assoc., Trinidad, 1867, p. 171; Geol. Mag.,  
London, Dec. II, I, 1874, p. 440.
113024. **Conus sulculus** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 60, fig. 27.  
See *Conus isomitratus sulculus*.
07380. **Conus tryoni** Heilprin. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Heilprin, Trans. Wagner Free Inst. Sci. Phila., I, 1887, p. 133,  
pl. 10b, fig. 75.  
= *Conus adversarius*.
155714. **Cooperella carpenteri** Dall. Holotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 103, pl. 14, fig. 8.
12008. **Coralliochama oreutti** White. Cotypes.  
Chico, Cret. Texas Santos Bay and Wallala, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1883, p. 10, pls. 1-4.



115804. **Coralliophaga bryani** Clark. Holotype.  
Eocene. Pamunkey Neck, Maryland.  
Clark, Johns Hopkins Univ. Circ. No. 15, 1895, p. 5; Bull. No. 141,  
U. S. Geol. Surv., 1896, p. 73, pl. 15, figs. 2a, 2b.  
*Coralliophaga elegans* Dall = *C. elegantula*.
155720. **Coralliophaga elegantula** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
pl. 25, figs. 2, 2a, as *C. elegans*; Pt. VI, 1903, p. 1499.
112186. **Coralliophila lepidota** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 156,  
pl. 9, fig. 3.
112069. **Coralliophila magna** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 155,  
pl. 11, figs. 11, 12.
11557. **Corbicula augheyi** White. Cotypes.  
Laramie (Cret.). Valley of South Platte River, Colorado.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 95, pl. 4, figs. 4-6;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 438, pl. 21,  
figs. 4-6.
7834. **Corbicula (Veloritina) bannisteri** Meek. Holotype.  
Laramie (Cret.). Black Butte Station, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 513.  
= *Corbicula occidentalis*.
11556. **Corbicula berthoudi** White. Cotypes.  
Laramie (Cret.). Valley of South Platte River, Colorado.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 94, pl. 4, figs. 1-3;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 438, pl. 21,  
figs. 1-3.
9024. **Corbicula cardiniæformis** White. Holotype.  
Laramie (Cret.). Crow Creek, Northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I., p. 73, pl. 25, figs. 5a, 5b.
9024. **Corbicula (Leptesthes) cardiniæformis** White. Holotype  
12477. and plesiotyp  
Laramie (Cret.). Crow Creek and Fremonts Orchards  
Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 437, pl. .  
figs. 10, 11, 12-15.



12477. *Corbicula (Leptesthes) cardiniæformis* White. Plesiotypes  
Laramie (Cret.). Valley of South Platte, Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 437, pl. 2,  
figs. 12-15.
9023. *Corbicula cleburni* White. Cotypes  
Laramie (Cret.). Crow Creek, Northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883)  
Pt. I, p. 73, pl. 23, figs. 1a-1c; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 437, pl. 20, figs. 7-9.
7728. *Corbicula? crassatelliformis* Meek. Cotype  
Laramie (Cret.). Hallville Coal Mines, Wyoming.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p.  
315-316.  
=*Corbula subtrigonalis*.
2133. *Corbicula cytheriformis* Meek and Hayden. Holotype  
2135. and paratype  
Laramie (Cret.). Bad Lands of Judith River, and near  
Fort Benton, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 520, pl. 1,  
figs. 5a-5e.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 437, pl. 22, figs. 1, 2.
8117. *Corbicula cytheriformis* Meek and Hayden. Plesiotypes  
9673. Montana (Cret.). Point of Rocks Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883)  
Pt. I, p. 74, pl. 21, figs. 4a-4d; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 437, pl. 22, figs. 3-6.
18644. *Corbicula (Veloritina) cytheriformis* Meek and Hayden. Plesiotypes  
18646. Montana and Laramie (Cret.). Point of Rocks and Blaine  
Butte Stations, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1877)  
p. 511.
7621. *Corbicula (Veloritina) durkeei* (Meek). Cotypes  
Bear River (Cret.). Sulphur Creek, Bear River, Wyoming.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 1,  
pl. 16, figs. 6-6d.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 437, pl. 8, figs. 10, 11.  
See *Cyrena (Corbicula) durkeei*.
8148. *Corbicula durkeei* (Meek). Plesiotypes  
8166. Bear River (Cret.). Mouth of Sulphur Creek and 3  
7621. miles north of Evanston, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 189  
1-4.  
See *Cyrena (Corbicula) durkeei*.



8148. *Corbicula (Veloritina) durkeei* (Meek). Plesiotypes.  
 8166. Bear River (Cret.). Mouth of Sulphur Creek and near  
 Evanston, Wyoming.  
 White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 437, pl. 8,  
 figs. 8, 9.
7742. *Corbicula ? fracta* Meek. Cotypes.  
 Laramie (Cret.). Hallville Coal Mines, Wyoming.  
 Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 314.
8104. *Corbicula (Leptesthes) fracta* Meek. Plesiotypes.  
 Laramie (Cret.). Black Butte Station, Wyoming.  
 White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 439, pl. 20,  
 figs. 2-6.
7838. *Corbicula ? fracta crassiuscula* Meek. Plesiotypes.  
 Laramie (Cret.). Black Butte Station, Wyoming.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
 p. 512.
7822. *Corbicula (Veloritina) inflexa* Meek. Cotypes.  
 Colorado (Cret.). Near Missouri River, below Gallatin  
 City, Montana.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
 p. 493.  
 =*Cyrena inflexa*.
8124. *Corbicula (Leptesthes) macropistha* White. Cotypes.  
 12475. Laramie (Cret.). Crow and Bijou Creeks, northern Colo-  
 rado.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
 Pt. I, p. 78, pl. 23, figs. 4a-4f; Third Ann. Rept. U. S. Geol.  
 Surv., 1883, p. 437, pl. 21, figs. 11-14.
2131. *Corbicula nebrascensis* Meek and Hayden. Holotype.  
 Laramie (Cret.). Moreau River, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 522, pl. 43,  
 figs. 2a, 2b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
 p. 437, pl. 20, figs. 12, 13.  
 See *Cyrena intermedea*.
7898. *Corbicula ? nucalis* Meek. Holotype and paratype.  
 Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
 Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 304;  
 Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 163, pl. 2, figs. 5a-c.
9025. *Corbicula obesa* White. Cotypes.  
 Laramie (Cret.). Crow and Bijou Creeks, northern Colo-  
 rado.  
 Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
 Pt. I, pl. 23, figs. 3a-3e; Third Ann. Rept. U. S. Geol.  
 Surv., 1883, p. 437, pl. 21, figs. 7-11.



2134. *Corbicula occidentalis* (Meek and Hayden.) Holotype and  
paratype.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 521, pl. 40,  
figs. 6a, 6b.  
See *Cyrena occidentalis*.
7834. *Corbicula occidentalis* (Meek and Hayden). Plesiotypes.  
8112. Laramie (Cret.). Black Butte Station, Wyoming, and  
Yampa Valley, northwestern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 75, pl. 21, fig. 3a; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 437, pl. 23, figs. 1-6.  
See *Corbicula bannisteri* 7834.
7841. *Corbicula?* (*Leptesthes*) *planumbona* Meek. Cotypes.  
Laramie (Cret.). Two hundred miles east of Denver,  
Colorado.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr. (2), I, No. 1, 1875,  
p. 43.
7841. *Corbicula* (*Leptesthes*) *planumbona* Meek. Cotypes and  
8126. plesiotypes.  
Laramie (Cret.). Two hundred miles east of Denver on  
Kansas Pacific Railroad, Crow Creek, northern  
Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 77, pl. 21, figs. 2a-d; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 437, pl. 22, figs. 7-9.
12508. *Corbicula powelli* White. Cotypes.  
Eocene.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 127.  
[The locality given is erroneous and the true location is unknown.  
See Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879), pp.  
191, 192. T. W. Stanton.]
20106. *Corbicula pugetensis* White. Cotypes.  
Puget (Cret.?) Carbonado, Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 60, pl. 11, fig. 8.
441. *Corbicula subelliptica* (Meek and Hayden). Holotype.  
Laramie (Cret.). Cherry Creek, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 523, pl. 43,  
fig. 9a.  
See *Tellina subelliptica*.
8123. *Corbicula subelliptica* (Meek and Hayden). Plesiotypes.  
Laramie (Cret.). Bijou Creek, Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 437, pl. 20,  
figs. 10, 11.



12473. **Corbicula (Leptesthes) subelliptica** (Meek and Hayden). Plesiotypes.  
Laramie (Cret.). Bijou Creek, Colorado.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 523, pl. 43, figs. 9b, 9c.
2132. **Corbicula subelliptica moreauensis** (Meek and Hayden). Holotype and paratypes.  
Laramie (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 524, pl. 43, figs. 1a, 1b, 2c.  
See *Cyrena moreauensis*.
7900. **Corbicula? subtrigonalis** Meek. Holotype.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 305; Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 164, pl. 2, fig. 6.
12468. **Corbicula umbonella** Meek. Plesiotypes.  
Laramie (Cret.). Fifteen miles north of Orchard Station, Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 438, pl. 21, figs. 7-10.
20105. **Corbicula willisi** White. Cotypes.  
Puget (Cret.? ). Carbonado, Wilkeson, and Green River Valley, Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 59, pl. 11, figs. 3-7.
154523. **Corbula (Aloidis) caloosæ** Dall. Holotype.  
154525. Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 853, pl. 36, fig. 16.
494. **Corbula (Potamomya?) concentrica** Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur Creek, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 313.  
= *Corbula (Anisorhynchus) pyriformis*.
299. **Corbula crassimarginata** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 244, pl. 17, figs. 14a-14c.
115590. **Corbula elevata** Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 86, pl. 15, figs. 16-19.



495. **Corbula (Potamomya?) engelmanni** Meek. Holotype.  
Bear River (Cret.). Bear River, near Sulphur Creek,  
Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 313.
495. **Corbula (Anisorhynchus?) engelmanni** Meek. Holotype.  
Cretaceous. Bear River, mouth of Sulphur Creek, Wyom-  
ing.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 174,  
pl. 17, fig. 1a.
23110. **Corbula engelmanni** (Meek). Plesiotypes.  
Bear River (Cret.). Near Waterfall, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 40, pl. 4, figs.  
10, 11.
114701. **Corbula engonata burnsii** Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
847.
23002. **Corbula filosa** Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 62, pl. 11, figs. 1, 2.
115843. **Corbula (fossata var.?) extenuata** Dall. Holotype.  
Eocene. Orangeburg District, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 844, pl. 36, fig. 6.
355. **Corbula? gregaria** Meek and Hayden. Holotype and  
paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 84.  
*Corbulamella gregaria*.
107000. **Corbula (Aloidis) heterogenea** (Guppy ms.) Dall. Holotype.  
Oligocene. Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III Pt. IV, 1898,  
p. 850, pl. 37, fig. 15.
23125. **Corbula hicksii** White. Plastotypes.  
Cretaceous. Five miles west of north of Fairburg,  
Nebraska.  
White, Proc. U. S. Nat. Mus., XVII, 1874, p. 134, pl. 5, figs. 6-8.
22000. **Corbula kanabensis** Stanton. Cotypes.  
Colorado Cret. Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 125, pl. 27,  
figs. 5, 6.



61730. **Corbula (Anisothyris) ledæformis** Dall. Holotype.  
Pliocene. Pebas, mouth of Ambigacu River, Brazil.  
Dall, Amer. Journ. Conch., VII, 1871, p. 92, pl. 16, figs. 14, 15.
2168. **Corbula mactriformis** Meek and Hayden. Holotype and  
paratypes.  
Laramie (Cret.). Fort Clark, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
p. 117.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 528,  
pl. 43, figs. 7a.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 442, pl. 18, figs. 12-15.
107813. **Corbula (Aloidis) milium** Dall. Holotype.  
Eocene. Thomasville, Clarke County, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 845, pl. 36, fig. 19.
420. **Corbula moreauensis** Meek and Hayden. Holotype and  
paratype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
p. 83.  
= *Neæra moreauensis*.
9899. **Corbula nasuta** Conrad. Plesiotypes.  
Tertiary. Western Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 161, pl. 19, fig. 4.
7830. **Corbula nematophora** Meek. Cotypes.  
7891. Colorado (Cret.). Near Cedar City, southern Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872, (1873),  
p. 496.—White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr.,  
1877 (1879), p. 290, pl. 3, figs. 4a-d —Stanton, Bull. No. 106,  
U. S. Geol. Surv., 1893, p. 124, pl. 27, figs. 3, 4.
8662. **Corbula nematophora** Meek. Plesiotypes.  
Colorado (Cret.). Plateau near westcrossing of North Fork  
of Virgin River, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 188, pl. 17, figs. 7a-c.
23061. **Corbula ? persulcata** Stanton. Holotype.  
Knoxville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 61,  
pl. 11, fig. 3.
2181. **Corbula perundata** Meek and Hayden. Paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII,  
p. 116.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 18  
530, pl. 40, fig. 4c.



493. **Corbula (Anisorhynchus) pyriformis** Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur  
Creek, Wyoming.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 361,  
pl. 5, figs. 9, 10.
493. **Corbula (Potamomya?) pyriformis** Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur  
Creek, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila. for 1860, p. 312.  
= **Corbula (Anisorhynchus) pyriformis**.
8149. **Corbula pyriformis** Meek. Plesiotypes.  
Bear River (Cret.). Mouth of Sulphur Creek, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 441, pl. 8,  
figs. 12-16; Bull. No. 128, U. S. Geol. Surv., 1895, p. 38,  
pl. 4, figs. 5, 6, 7, 8, 9.
107388. **Corbula (Bothrocorbula) radiatula** Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 851, pl. 36, figs. 1-3.
135909. **Corbula (Bothrocorbula) radiatula tenella** Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 851.
114621. **Corbula (Cuneocorbula) sarda** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
847, pl. 36, fig. 14.
135910. **Corbula (Cuneocorbula) seminella** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
848, pl. 36, fig. 11.
114802. **Corbula (Cuneocorbula) sericea** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
848, pl. 36, fig. 8.
154511. **Corbula (Cuneocorbula) sphenia** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
847, pl. 36, fig. 10.
111501. **Corbula subcontracta** Whitfield. Cotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 88, pl. 15,  
figs. 11-14. -Dall, Trans. Wagner Free Inst. Sci. Phila., III,  
Pt. IV, 1898, p. 852.  
= **Corbula (Cuneocorbula) subcontracta**.



2183. **Corbula subtrigonalis** Meek and Hayden. Holotype and paratypes.

Laramie (Cret.). Mouth of Judith River, Montana.

Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 116.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 529, pl. 40, figs. 3a, 3b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 442, pl. 19, fig. 10.

See *Corbicula crassatelliformis*.

22901. **Corbula subtrigonalis** Meek and Hayden. Plesiotypes. Colorado (Cret.). Bear River City, Wyoming.

Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 123, pl. 27, figs. 7, 8.

8107. **Corbula subtrigonalis** Meek and Hayden. Plesiotypes. Laramie (Cret.). Crow Creek, northern Colorado.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 80, pl. 25, figs. 6a-c; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 442, pl. 19, figs. 11-13.

8109. **Corbula subtrigonalis tropidophora** (Meek). Cotypes. Montana (Cret.). Near Point of Rocks Station, Wyoming.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 80, pl. 25, fig. 6f; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 442, pl. 19, fig. 15.

See *Corbula tropidophora*.

- 114862a. **Corbula (Cuneocorbula) swiftiana nuculeata** Dall. Holotype.

Oligocene. Alum Bluff, Calhoun County, Florida.

Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 855, pl. 36, fig. 17.

154501. **Corbula (Bothrocorbula) synarmostes** Dall. Cotypes. Oligocene. Chipola River, Calhoun County, Florida.

Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 850., pl. 36, figs. 12, 13.

8109. **Corbula tropidophora** Meek. Cotypes. Montana (Cret.). Point of Rocks, Wyoming.

Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p. 514.

= *Corbula subtrigonalis tropidophora*.

9060. **Corbula undifera** Meek. Plesiotypes. Laramie (Cret.). Rock Springs Station, Wyoming.

Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p. 513.—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 80, pl. 29, figs. 4a-f; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 442, pl. 18, figs. 6-9.

9056. **Corbula undifera subundifera** White. Cotype. Montana (Cret.). Point of Rocks, Wyoming.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 81, pl. 29, figs. 5a-c; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 442, pl. 18, figs. 10-11.



419. **Corbula ventricosa** Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 83.
115650. **Corbula vieta** Guppy. Holotype.  
115651. Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 580, pl. 26, fig. 8.  
= *Corbula disparilis*.
115648. **Corbula viminea** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 293, pl. 18, fig. 11.
135911. **Corbula (Cuneocorbula) whitfieldi** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 849, pl. 36, fig. 18.
154502. **Corbula (Bothrocorbula) willcoxii** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 851, pl. 36, fig. 9.
355. **Corbulamella gregaria** (Meek and Hayden). Holotype and paratypes.  
Montana (Cret.). Yellowstone River, near Miles City, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 143.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 247, pl. 17, figs. 13a-d.  
See *Corbula?* *gregaria*.
22307. **Corbulomya tauschii** White. Cotypes.  
Bear River (Cret.). Sage Station, Twin Creek Valley, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 40, pl. 4, figs. 12, 13.
44090. **Coscinium cribriforme** Prout. Plesiotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 497, pl. 43, fig. 8.
43746. **Coscinium latum** Ulrich. Cotypes.  
Burlington (Miss.). Burlington, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 497, pl. 76, figs. 7a, 7b.



15302. **Coscinocyathus billingsi** (Walcott). Holotype.  
Lower Cambrian. L'Anse au Loup, Labrador.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 600, pl. 51,  
figs. 2-2b.  
See *Archæocyathus billingsi*.
25556. **Cossonus rutilus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 155, pl. 12, fig. 7.
35359. **Cranæna subelliptica** Hall and Clarke. Plesiotypes.  
Waverly (Miss.). Sciotoville, Ohio.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 299, pl. 1,  
figs. 6, 7.
35360. **Cranæna subelliptica hardingensis** Girty. Cotypes.  
35361. Millsap (Miss.). Canyon and Garden Park, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 299, pl. 1,  
figs. 8-10.
35163. **Crania lævis** Keyes. Plesiotype.  
Madison (Miss.). Crowfoot Ridge, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 520, pl.  
68, fig. 1a.
8053. **Crassatella cimarronensis** White. Cotypes.  
Fox Hills (Cret.). Cimarron, New Mexico.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 287, pl. 5, figs. 3a-3c.
13339. **Crassatella collina** Conrad. Holotype.  
Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Survs. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 193, pl. 6, figs. 1, 2.
553. **Crassatella cuneata** Gabb. Cotype.  
Ripley (Cret.). Eufaula, Alabama.  
Gabb, Synop. of the Mollusca of the Cretaceous Formation, 1861,  
p. 112.  
See *Crassatella pteropsis*.
2490. **Crassatella declivis** Heilprin. Holotype.  
Eocene. Aquia Creek, Virginia.  
Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 151, fig. 9.
322. **Crassatella (Pachythærus) evansi** (Hall and Meek). Plesiotyr  
Port Pierre (Cret.). Near Sage Creek, on Chey  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 117, pl  
figs. 6a-d.



22875. *Crassatella excavata* Stanton. Cotype  
Colorado (Cret.). Williams Creek, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 96, pl. 21, figs. 10-13.
111598. *Crassatella melina* Conrad. Plesiotyp  
Miocene. Near Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 60, pl. figs. 11-13.
553. *Crassatella pteropsis* Gabb. Cotyp  
Ripley (Cret.). Eufaula, Alabama.  
Gabb, Journ. Acad. Nat. Sci. Phila., (2), IV, 1860, p. 395.  
= *Crassatella cuneata*.
20258. *Crassatella shumardi* Meek. Cotype  
Montana (Cret.). Popes Well, New Mexico.  
Meek, Rept. Expl. Exped. Santa Fe to junction of Grand and Green Riv., Macomb, 1876, p. 127, pl. 2, figs. 7a-c.
12301. *Crassatella subquadrata* Whitfield. Holotyp  
Fort Pierre (Cret.). Cheyenne River, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1888, p. 412, pl. 11, fig. 12.
20053. *Crassatella tuscana* (Gabb). Plesiotyp  
Nanaimo (Cret.). Sucia and Waldron Islands, Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 39, pl. 6, figs. 2-4.
15782. *Crassatella unioides* Stanton. Cotypes  
Lower Tertiary. Exeter. One mile southeast of Lower Lake Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897, p. 101, pl. 25, figs. 1-2.
1221. *Crassatella oblonga* Meek. Holotype and paratypes  
Miocene. Twelve miles southwest of Salina, Kansas.  
Meek, Fourteenth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 30, pl. 1, fig. 1.  
Meek, Sixteenth Ann. Rept. U. S. Geol. Surv. Terr., IX, 1875, p. 30, pl. 1, fig. 1.
15783. *Crassatella acuta* Dall. Holotyp  
Pliocene. Chalk Bluffs, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 107, pl. 5, fig. 1.
15784. *Crassatella nevadensis* Dall. Cotypes  
Pliocene. Chalk Bluffs, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 107, pl. 5, fig. 2.



114713. **Crassatellites (Scambula) chipolanus** Dall. Holotype.  
Chipola (Oligocene). McDonald's ranch, Chipola River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1472, pl. 49, fig. 12.
139086. **Crassatellites clarkensis** Dall. Cotypes.  
Eocene. Wahtubbee, Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
pl. 36, figs. 20, 21, 24, 25; Pt. VI, 1903, p. 1470.
107382. **Crassatellites (Scambula) densus** (Dall). Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
pl. 39, figs. 9-12, as *C. densus*; Pt. VI, 1903, p. 1472.
114922. **Crassatellites (Crassinella) duplinianus** Dall. Cotypes.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1478, pl. 50, figs. 5, 6.
1630. **Crassatellites (Crassinella) galvestonensis** (Harris).  
Plesiotype.  
Miocene. Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1478, pl. 49, fig. 14.
107151. **Crassatellites (Crassinella) guppyi** Dall. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 326, pl. 30, fig. 5.
135733. **Crassatellites (Scambula) jamaicensis** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1471, pl. 49, fig. 12.
6123. **Crassatellites (Crassinella) lunulatus** (Conrad). Plesiotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1477, pl. 49, fig. 15.
114829. **Crassatellites (Scambula) melinus meridionalis** Dall.  
Holotype.  
Miocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III Pt. V, 1900, pl. 37,  
figs. 6, 13; Pt. VI, 1903, p. 1473.
107451. **Crassatellites (Scambula) psychopterus** (Dall). Holot  
Eocene. Wahtubbee, Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 42, figs. 8, 9, as *C. psychopterus*; Pt. VI, 1903, p. 1470.



135852. **Crassatellites (Crassinella) tanicus** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1477, pl. 49, fig. 11.
114607. **Crassatellites (Crassinella) triangulatus** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1476, pl. 49, fig. 16.
43646. **Crateripora erecta** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 29, pl. 7,  
figs. 29, 29a.  
= Attached base of *Arthropora shafferi*.
43729. **Crateripora lineata** Ulrich. Holotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 30, pl. 7,  
figs. 28, 28a.  
= Attached base of *Escharopora falciformis*.
43730. **Crateripora lineata expansa** Ulrich. Holotype.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 30.  
= Attached base of *Escharopora falciformis*.
114891. **Crenella duplinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 804, pl. 35, fig. 6.
1925. **Crenella elegantula** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 441.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 75, pl. 28,  
figs. 6a-c.
114624. **Crenella minuscula** Dall. Holotype.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 803,  
pl. 35, fig. 22.
14360. **Crenipecten hallanus** Walcott. Cotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 231, pl. 8, figs. 7, 7c.
24576. **Crepicephalus (Loganellus) anytus** Hall and Whitfield. Cotypes.  
Upper Cambrian. Schell Creek, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 4th Part., IV, Pt. II,  
1877, p. 210, pl. 2, figs. 10-21.  
= *Ptychoparia* ? anytus.



15430. **Crepicephalus augusta** Walcott. Cotypes.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 208, pl. 28,  
figs. 2-2b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 653,  
pl. 96, figs. 9-9b.
24581. **Crepicephalus centralis** Whitfield. Cotypes.  
Upper Cambrian. Castle Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 341, pl. 2, figs. 21-24.  
= *Ptychoparia centralis*.
24573. **Crepicephalus (Loganellus) granulosus** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 214, pl. 2, figs. 2, 3.  
= *Ptychoparia* ? *granulosa*.  
See *Crepicephalus (Loganellus) simulator*.
24660. **Crepicephalus (Loganellus) haguei** Hall and Whitfield. Cotypes.  
Upper Cambrian. West side of Pogonip Mountain and near  
French Mine, White Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 210, pl. 2, figs. 14, 15.
15428. **Crepicephalus liliana** Walcott. Cotypes.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 207, pl. 28,  
figs. 3-3c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 653,  
pl. 96, figs. 7-7c.
24617. **Crepicephalus (Loganellus) maculosus** Hall and Whitfield. Cotypes.  
Middle Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 215, pl. 2, figs. 24, 26.  
= *Ptychoparia maculosa*.
24572. **Crepicephalus (Loganellus) nitidus** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 212, pl. 2, figs. 8-10.  
= *Ptychoparia* ? *nitidus*.
24580. **Crepicephalus planus** Whitfield. Cotypes.  
Upper Cambrian. Castle Creek, Black Hills, South  
Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 343, pl. 2, fig. 20.  
= *Ptychoparia planus*.



15432. **Crepicephalus ? (Loganellus) quadrans** Hall and Whitfield. Cotypes.  
Middle Cambrian. Canyon above Calls Fort, Wasatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 238, pl. 2, figs. 11-13.  
= *Ptychoparia quadrans*.
24575. **Crepicephalus (Loganellus) simulator** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 218, pl. 2, figs. 16-18.  
= *Ptychoparia ? simulator*.  
See *Crepicephalus (Loganellus) granulatus*.
35232. **Crepicephalus texanus** (Shumard). Plesiotype.  
Middle Cambrian. Coosa Valley, Alabama.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 460, pl. 65, fig. 5.
24574. **Crepicephalus (Loganellus) unisulcatus** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 216, pl. 2, figs. 22, 23.  
= *Ptychoparia ? unisulcata*.
163532. **Crepidula æsop** Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 55, figs. 6, 7.
3496. **Crepidula prærupta** Conrad. Holotype.  
3564. Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 727, Atlas, pl. 19, figs. 9a, 10a, b.
164900. **Crepidula precursor** Dall. Holotype.  
Eocene. Chichagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 110, pl. 9, fig. 3.
1839. **Crepidula princeps** Conrad. Holotype.  
Post-tertiary. Santa Barbara, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, V, 1856, p. 326, pl. 6, figs. 52, 52a.  
[Probably the same as *Crepidula prærupta* Conrad. W. H. Dall.]
164918. **Crepidula ungana** Dall. Cotypes.  
Miocene. Coal Bluff, Unga Island, Shumagins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 119, pl. 10, figs. 8, 9.



43229. **Crepipora ? epidermata** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 471, pl. 40, figs. 1c-1e.  
= *Bythotrypa epidermata*.
43234. **Crepipora hemisphærica** Ulrich. Cotype and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 472, pl. 40, figs. 5a, 5b.
43231. **Crepipora impressa** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 471, pl. 40, figs. 2-2a.
43235. **Crepipora perampla** Ulrich. Figured sections and fragment  
of holotype.  
Stones River (Ord.). Fillmore County, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 323, pl. 28, figs. 29-32.
43230. **Crepipora simulans** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 470, pl. 39, figs. 4, 4a; pl.  
40, figs. 3, 3a.
43232. **Crepipora solida** Ulrich. Cotypes.  
Utica (Ord.). Near Covington, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 472, pl. 40, figs. 4-4b.
43228. **Crepipora spatiosa** Ulrich. Holotype and figured sections.  
Trenton (Ord.). Harrodsburg, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 323.
43233. **Crepipora subæquata** Ulrich. Holotype and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 322, pl. 28, figs. 26-28.
115513. **Crepitacella cepula** (Guppy). Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Geol. Mag., London, Dec. I, IV, 1867, p. 500; Dec. II, I,  
1874, p. 442.  
See *Melanopsis capula*.
35410. **Crioblastus schucherti** Hambach. Cotypes.  
Lower Carboniferous. Divide between Ross Fork and  
Lincoln Valley, Montana.  
Hambach, Trans. Acad. Sci. St. Louis, XIII, 1903, p. 59, pl. 5,  
figs. 8, 8a.
112782. **Crucibulum auricula chipolanum** Dall. Cotype  
Oligocene. One mile below Baileys Ferry, Chipola River  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 349.



116663. **Crucibulum costatum** (Say.). Plesiotypes.  
Miocene. Shiloh and Bridgeton, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 122, pl. 22,  
figs. 11-14.
115611. **Crucibulum piliferum** Guppy. Cotypes.  
Pliocene. Matura, Trinidad.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 435.
115612. **Crucibulum subsutum** Guppy. Holotype.  
Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 435, pl. 18, fig. 4.
39916. **Crumenæcrinites ovals** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
8614. **Cruziana linnarsoni** White. Cotypes.  
Tonto (Cambrian). Grand Canyon of the Colorado River,  
Mohave County, Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 5; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 32, pl. 1, figs. 2a-2c.
8615. **Cruziana rustica** White. Cotypes.  
Tonto (Cambrian). Grand Canyon of the Colorado River,  
Mohave County, Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 5; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 33, pl. 1, figs. 1a, 1b.
4951. **Cryphæus boothii** Green. Plastotype.  
Hamilton (Dev.). Huntingdon County, Pennsylvania.  
Green, Amer. Journ. Sci., XXXII, 1837, p. 344. Cast No. 50.  
= Dalmanites (Cryphæus) boothii.
4969. **Cryphæus collitelus** Green. Plastotype.  
Hamilton (Dev.). Alexandria, Pennsylvania.  
Green, Amer. Journ. Sci., XXXII, 1837, p. 346. Cast No. 55.  
= Dalmanites (Cryphæus) boothii calliteles.
4921. **Cryptolithus tessellatus** Green. Plastotype.  
Trenton or Utica (Ord.). Trenton Falls, New York.  
Green, Mon. Trilobites of N. America, Phila., 1832, p. 73. Casts  
Nos. 28, 29.  
= Cryptolithus concentricus.
13861. **Cryptonella ? circula** Walcott. Cotypes.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 163, pl. 15,  
figs. 2-2b.



13860. **Cryptonella pinonensis** Walcott. Holotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 163, pl. 4, figs. 4-4b.
25548. **Cryptorhynchus annosus** Scudder. Plesiotype.  
Older Tertiary. Roan Mountains, Western Colorado, and  
White River, Eastern Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 128, pl. 11, fig. 10.
25547. **Cryptorhynchus durus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, Western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 126, pl. 11, fig. 8.
38865. **Cryptozoe problematicus** Packard. Holotype.  
Coal Measures. Mazon Creek, Illinois.  
Packard, Proc. Amer. Philos. Soc., XXIII, 1886, p. 381, plate  
figs. 1, 2.
33799. **Cryptozoon ? occidentale** Dawson. Cotypes.  
Chuar (Algonkian). Grand Canyon, Arizona.  
Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 233, pl. 23, figs. 1-4.
41489. **Ctenobolbina alata** Ulrich. Cotypes.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 110,  
pl. 7, figs. 4a-c.
41319. **Ctenobolbina (? Bollia) antespinosa** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 187,  
pl. 15, figs. 9a-c.
41494. **Ctenobolbina armata** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 181,  
pl. 8, fig. 6.
41490. **Ctenobolbina bispinosa** Ulrich. Holotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 110,  
pl. 7, fig. 6.
41495. **Ctenobolbina cavimarginata** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 182, pl.  
8, figs. 7-9.
41492. **Ctenobolbina ciliata** (Emmons). Plesiotypes.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 108, 1  
figs. 1a, 1b.



41325. *Ctenobolbina ciliata emaciata* Ulrich. Holotype.  
Richmond (Ord.). Savannah, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 109, pl. 7,  
figs. 3a-c.
41497. *Ctenobolbina crassa* (Ulrich). Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 675, pl. 44, figs. 12-16.  
See *Jonesella crassa*.
41322. *Ctenobolbina fulcrata* Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
p. 674, pl. 44, figs. 8-11.
41324. *Ctenobolbina granosa* Ulrich. Holotype.  
New Scotland (Dev.). Albany County, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 183, pl.  
8, fig. 12.
41320. *Ctenobolbina informis* Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 187, figs.  
6a-c.
41318. *Ctenobolbina insolens* Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 182, pl. 8,  
figs. 10, 11.
41323. *Ctenobolbina loculata* Ulrich. Cotypes.  
Kinderhook (Miss.). Mt. Pleasant, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 184, pl.  
8, figs. 13, 14.
41370. *Ctenobolbina minima* Ulrich. Holotype.  
Hamilton (Dev.). Eighteen Mile Creek, near Buffalo,  
New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 188, pl.  
15, fig. 7.
41328. *Ctenobolbina obliqua* Ulrich. Holotype.  
Trenton (Ord.). Kenyon, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 180, pl.  
8, fig. 4.
41321. *Ctenobolbina papillosa* Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 186, pl.  
15, figs. 8a-c.
41578. *Ctenobolbina punctata* Ulrich. Holotype.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 186, pl.  
12, figs. 5a-c.



41317. **Ctenobolbina spiculosa** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 181, pl. 8, fig. 5.
41316. **Ctenobolbina subcrassa** Ulrich. Cotypes.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 180, pl. 8, figs. 1-3.
41326. **Ctenobolbina tumida** Ulrich. Holotype.  
Richmond (Ord.). McKinneys, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 111, pl. 7, figs. 5a, b.
46122. **Ctenodonta albertina** Ulrich. Cotypes.  
Richmond (Ord.). Clarksville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 598, pl. 42, figs. 76-82.
46123. **Ctenodonta alta** (Hall). Plesiotype.  
Trenton (Ord.). Near Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 602, pl. 42, figs. 93, 94.
46124. **Ctenodonta calvini** Ulrich. Cotypes.  
Richmond (Ord.). Graf, Iowa.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 596, pl. 42, figs. 61-64.
46125. **Ctenodonta carinata** Ulrich. Cotypes.  
Trenton (Ord.). Near Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 589, pl. 42, figs. 41-43.
28164. **Ctenodonta carpenderi** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 160, pl. 13, figs. 1-3.
46127. **Ctenodonta cingulata** (Ulrich). Plesiotypes.  
Richmond (Ord.). Boyle County, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 680, pl. 48, figs. 10, 11.  
See *Tellinomya cingulata*.
46128. **Ctenodonta compressa** (Ulrich). Holotype and plesiotypes.  
Black River (Ord.). Five miles south of Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 600, pl. 37, fig. 29; pl. 42, figs. 88-90.  
See *Tellinomya compressa*.



46129. **Ctenodonta cuneiformis** Ulrich. Cotypes.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 587, pl. 42, figs. 31-33.
46130. **Ctenodonta fecunda** (Hall). Plesiotypes.  
Richmond (Ord.). Near Dubuque, Iowa.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 595, pl. 42, figs. 67-73.
46131. **Ctenodonta filistriata** Ulrich. Cotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 599, figs. 44a-e.
28165. **Ctenodonta frobisherensis** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 161, pl. 13,  
figs. 11-14.
46132. **Ctenodonta gibberula** Salter. Plesiotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 599, figs. 44f, g.
46133. **Ctenodonta hamburgensis** (Walcott). Plesiotype.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 605, pl. 42, figs. 91, 92.
46134. **Ctenodonta intermedia** (Ulrich). Cotypes.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 601, pl. 42, figs. 95-97.  
See *Tellinomya intermedia*.
46135. **Ctenodonta longa** (Ulrich). Holotype.  
Black River (Ord.). Eight miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 590, pl. 37, figs. 30, 31.  
See *Tellinomya longa*.
46136. **Ctenodonta madisonensis** Ulrich. Holotype.  
Richmond (Ord.). Madison, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 597, pl. 42, figs. 65, 66.
46137. **Ctenodonta medialis** Ulrich. Cotypes.  
46138. Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Trenton (Ord.). Kenyon, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 593, pl. 42, figs. 50-52.



46139. **Ctenodonta nasuta** (Hall). Plesiotype.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 584, pl. 42, fig. 30.
46140. **Ctenodonta nasuta robusta** Ulrich. Holotype.  
Black River (Ord.). Paquette Rapids, Ottawa River,  
Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 585.  
See *Tellinomya nasuta*.
46141. **Ctenodonta nitida** (Ulrich). Cotypes.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 592, pl. 42, figs. 44-49.  
See *Tellinomya nitida*.
46142. **Ctenodonta obliqua** (Hall). Plesiotypes.  
46143. Richmond (Ord.). Scales Mound, Illinois.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 604, pl. 42, figs. 83-87.
46144. **Ctenodonta oviformis** Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 586, pl. 42, fig. 29.
46145. **Ctenodonta perminuta** Ulrich. Cotypes.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 680, pl. 46, figs. 11-14.
46146. **Ctenodonta planodorsata** (Ulrich). Holotype and  
plesiotypes.  
Black River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 589, pl. 37, figs. 25-28; pl. 42, figs. 38-40.  
See *Tellinomya planodorsata*.
46147. **Ctenodonta recurva** (Ulrich). Cotypes.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 603, pl. 42, figs. 98-101.  
See *Tellinomya recurva*.
46148. **Ctenodonta regia** Ulrich. Cotypes.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 585.



46149. **Ctenodonta retrorsa** Ulrich. Holotype.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 679, pl. 50, figs. 14, 15.
46150. **Ctenodonta scofieldi** Ulrich. Cotypes.  
46151. Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 539, pl. 42, figs. 53-58.
46152. **Ctenodonta similis** (Ulrich). Plesiotypes.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 604, pl. 42, figs. 102, 104-106.  
See *Tellinomya similis*.
46153. **Ctenodonta simulatrix** Ulrich. Holotype.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 601, pl. 42, figs. 95-97.
46154. **Ctenodonta socialis** Ulrich. Cotypes.  
46155. Black River (Ord.). Chatfield and six miles south of Can-  
non Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 594, pl. 42, figs. 59, 60.
46156. **Ctenodonta subnasuta** Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 585, pl. 42, figs. 34-36.
28163. **Ctenodonta subnasuta** Ulrich? Plesiotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 160, pl. 13,  
figs. 4-6.
430. **Cucullæa (Idonearca?) cordata** (Meek and Hayden).  
Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rep. U. S. Geol. Surv. Terr., IX, 1876, p. 89, pl. 29, figs.  
6a, 6b.  
See *Arca* (*Cucullæa*) *cordata*.
348. **Cucullæa exigua** Meek and Hayden. Holotype and paratype.  
Fort Pierre (Cret.). Mouth of Milk River, Montana.  
Meek and Hayden, Proc. Acad. Sci. Phila., VIII, 1856, p. 275.  
= *Trigonarca* (*Breviarca*) *exigua*.
12546. **Cucullæa haguei** Meek. Holotype.  
Jurassic. Weber Canyon, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 134,  
pl. 12, figs. 1-1b.



28955. *Cucullæa haguei* Meek. Plesiotypes.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 618, pl. 73, fig. 1.
20089. *Cucullæa increbescens* White. Holotype.  
Jurassic. Wrangell Bay, Alaska.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 65, pl. 14, figs. 5, 6.
157834. *Cucullæa matthewsoni* Gabb. Plesiotypes.  
Lower Tejon (Eocene). One mile southeast of Lower Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897, p. 1039, pl. 64, figs. 4, 5.
20245. *Cucullæa nebrascensis* Owen. Holotype.  
Fox Hills (Cret.). Fox Hills, between Cheyenne and Moreau Rivers, South Dakota.  
Owen, Rept. Geol. Surv. Wis., Iowa and Minn., 1852, p. 582, pl. 7, figs. 1, 1a.
442. *Cucullæa (Idonearca) nebrascensis* (Owen). Plesiotypes.  
Fox Hills (Cret.). Fox Hills, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 88, pl. 29, figs. 5a, 5b.
7849. *Cucullæa (Trigonarca) obliqua* Meek. Cotypes.  
Colorado (Cret.). East Canyon Creek, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 148, pl. 14, figs. 1a.
443. *Cucullæa (Idonearca) shumardi* (Meek and Hayden). Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 86, pl. 28, figs. 15a-g; pl. 29, fig. 4.  
See *Arca (Cucullæa) shumardi* and *Idonearca shumardi*.
9890. *Cucullæa terminalis* Conrad. Cotypes.  
Lower Cretaceous. Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 148, pl. 4, figs. 2a, 2b.
46158. *Cuneamya curta* Whitfield. Plesiotype.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 477, fig. 3.
46159. *Cuneamya oblonga* Ulrich. Holotype.  
Trenton (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 623, pl. 36, figs. 40, 41.



3020. *Ceratomya sulcodorsata* Ulrich. Holotype  
Kishwaukee (Ord.). Spring Valley, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.  
1882, p. 248, fig. 32.  
= *Saferdia sulcodorsata*.
3021. *Ceratomya truncatula* Ulrich. Holotype  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., II, p. 2  
1884, p. 322, pl. 36, fig. 33.
3022. *Cephalocrinites buchii* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3023. *Cephalocrinites corrugatus* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3024. *Cephalocrinites inflatus* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3025. *Cephalocrinites levii* Truex. Chicago  
Sibiria. Middle Gales, Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3026. *Cephalocrinites magnificus* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3027. *Cephalocrinites pentagonalis* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3028. *Cephalocrinites triangularis* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3029. *Cephalocrinites scalaris* Truex. Chicago  
Sibiria. Decker and Decker Counties, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3030. *Cephalocrinites reticulatus* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.
3031. *Cephalocrinites ventralis* Truex. Chicago  
Sibiria. Decker County, Tennessee.  
Truex, Proc. Amer. Assoc. Adv. Sci., II, 1884, p. 11.



135691. **Cuspidaria (Cardiomya) craspedonia** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1506, pl. 57, fig. 17.
135692. **Cuspidaria (Bowdenia) distira** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1506, pl. 57, fig. 16.
- Cyathocrinites. See Cyathocrinus.
39950. **Cyathocrinus globatus** Troost. Chirotype.  
Ordovician. Near Nashville, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39945. **Cyathocrinus corrugatus** Troost. Chirotype.  
Mississippian?. Harpeth Ridge, Davidson County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39971. **Cyathocrinus crateriformis** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
40894. **Cyathocrinus crawfordsvillensis** Miller. Holotype.  
Keokuk (Miss.). Crawfordsville, Indiana.  
Miller, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 79, pl. 3,  
fig. 1.
39969. **Cyathocrinus depressus** Troost. Chirotypes.  
Mississippian. White Creek Springs, Davidson County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39946. **Cyathocrinus gracilis** Troost. Chirotype.  
Mississippian. Near Sparta, White County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
40895. **Cyathocrinus harrisi** Miller. Holotype.  
Keokuk (Miss.). Crawfordsville, Indiana.  
Miller, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 255, pl. 15,  
fig. 2.
39943. **Cyathocrinus inflatus** Troost. Chirotypes.  
Mississippian. Near Huntsville, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39972. **Cyathocrinus robustus** Troost. Chirotypes.  
Silurian?. Harpeth Ridge, Davidson County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.



39944. **Cyathocrinus römerii** Troost. Chirotypes.  
Mississippian. Near Huntsville, Alabama.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39951. **Cyathocrinus sculptus** Troost. Chirotypes.  
Ordovician. Knox County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39942. **Cyathocrinus stellatus** Troost. Chirotypes.  
Mississippian?. Stewart County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
8033. **Cyathocrinus stillativus** White. Holotype.  
Upper Carboniferous. Thirty miles west of Humboldt,  
Kansas.  
White, Proc. U. S. Nat. Mus., II, 1880, p. 258, pl. 1, figs. 9, 10;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 125,  
pl. 35, figs. 3a, 3b.
39948. **Cyathocrinus tennesseæ** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
109291. **Cyathodonta guadalupensis** Dall. Holotype.  
Oligocene. Guadaloupe Island, Lesser Antilles.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1527, pl. 53, fig. 6.
109292. **Cyathodonta spenceri** Dall. Holotype.  
Oligocene. Guadaloupe Island, Lesser Antilles.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1527, pl. 53, fig. 8.
5176. **Cyathodonta vicksburgiana** Dall. Holotype.  
Vicksburgian (Oligocene). Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1526, pl. 57, fig. 27.
25349. **Cyathophycus reticulatus** Walcott. Plesiotypes.  
Utica (Ord.). Near Holland Patent, New York.  
Rauff, Palaeontographica, XL, 1894, p. 252, pl. 2, fig. 1.
14553. **Cyathophyllum arcticum** Meek. Cotypes.  
Base of Upper Devonian. Grand River, Mackenzie River  
Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 79, pl. 11, figs. 8-8b.
17934. **Cyathophyllum fungites** Fleming?. Plesiotypes.  
Keokuk or Warsaw (Miss.). Keokuk Rapids of Missis-  
sippi River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 4,  
fig. 4.



24544. **Cyathophyllum (Campophyllum?) nevadense** Meek. Holotype.  
Upper Carboniferous. Boxelder Peak, Wahsatch Range,  
Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 60,  
pl. 5, figs. 3-3b.
14545. **Cyathophyllum palmeri** Meek. Holotype.  
Middle Devonian. Rio Verde, Arizona.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 33,  
pl. 2, fig. 2.
24545. **Cyathophyllum subcæspitosum** Meek. Holotype.  
Upper Carboniferous. Near Swansea, White Pine District,  
Nevada.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 470, in a footnote; Rept. U. S. Geol. Expl. 40th Par., IV,  
Pt. I, 1877, p. 60, pl. 5, figs. 4-4b.
17953. **Cyathophyllum (vermiculare Goldfuss?) torquium** Owen. Holotype.  
Upper Carboniferous. Keg Creek, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, tab. IV,  
fig. 2.  
=Campophyllum torquium.
13314. **Cyclas estrellana** Conrad. Holotype.  
13351. Miocene. Estrella, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 6, fig. 6.
2125. **Cyclas formosa** Meek and Hayden. Paratypes.  
Laramie (Cret.). Ten miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p.  
115.  
=Sphærium formosum.
2125. **Cyclas fragilis** Meek and Hayden. Cotypes.  
Laramie (Cret.). Ten miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p.  
115.  
=Sphærium formosum.
13340. **Cyclas permacra** Conrad. Holotype.  
Miocene. Sierra Monica, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 7, fig. 4.



2128. **Cyclas subellipticus** Meek and Hayden. Holotype and paratype.  
Laramie (Cret.). Ten miles below Fort Union, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 115.  
= *Sphaerium subellipticum*.
135257. **Cyclinella gatunensis** Dall. Holotype.  
Eocene. Gatun, Panama Canal, Panama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1285, pl. 52, fig. 18.
46161. **Cycloconcha mediocardinalis** Miller. Plesiotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 686, pl. 48, fig. 12.
46162. **Cycloconcha milleri** (Meek). Plesiotypes.  
47344. Richmond (Ord.). Versailles, Indiana; Hanover, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 686, pl. 51, figs. 14-21.  
See *Anodontopsis? milleri*.
46163. **Cycloconcha ovata** Ulrich. Cotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 687, pl. 48, figs. 13-15.
40733. **Cyclocystoides magnus** Miller and Dyer. Plesiotype.  
Richmond (Ord.). Waynesville, Ohio.  
Miller and Dyer, Journ. Cincinnati Soc. Nat. Hist., IV, 1881, p. 70, pl. 1, figs. 2, 2a.
45763. **Cyclonema bilix** (Conrad). Plesiotypes.  
45764. Richmond (Ord.). Versailles, Indiana; Waynesville and  
45765. Clarksville, Ohio.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1058, pl. 78, figs. 35-37.
45766. **Cyclonema bilix conicum** Miller. Plesiotypes.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1058, pl. 78, figs. 38, 39.
45767. **Cyclonema bilix fluctuatum** James. Plesiotype.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1059, pl. 78, figs. 40-42.
45768. **Cyclonema gracile** Ulrich. Cotypes.  
45769. Lorraine (Ord.). Newport, Kentucky; Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1062, pl. 82, figs. 55-58.



45770. **Cyclonema gracile striatellum** Ulrich. Holotype.  
Lorraine (Ord.). Newport, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1062, pl. 82, figs. 59-61.
45771. **Cyclonema humerosum** Ulrich. Cotypes.  
45772. Lorraine (Ord.). Cincinnati, Ohio.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1061, pl. 78, figs. 43-46.
45773. **Cyclonema inflatum** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1060, pl. 78, figs. 31, 32.
45774. **Cyclonema (Holoepa?) limatum** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1063, pl. 82, figs. 62-64.
45775. **Cyclonema mediale** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1059, pl. 78, figs. 29, 30.
46052. **Cyclonema (Gyronema?) præcceptum** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1055, pl. 78, figs. 22-25.
45776. **Cyclonema pyramidatum** James. Plesiotype.  
Lorraine (Ord.). Near Morrow, Ohio.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1061, pl. 78, figs. 33, 34.
45777. **Cyclonema simulans** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1061, pl. 78, fig. 47.
45778. **Cyclonema sublæve** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1062, pl. 78, figs. 48, 49.
45779. **Cyclonema transversum** Ulrich. Cotypes.  
45780. Lorraine (Ord.). Cincinnati, Ohio; Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1062, pl. 82, figs. 65-67.
45781. **Cyclonema varicosum** Hall. Plesiotypes.  
45782. Trenton (Ord.). Colby, Kentucky; Nashville, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1060, pl. 78, figs. 27, 28.



43403. *Cyclopora expatiata* Ulrich. Cotypes and figured sections.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 673, pl. 68, figs. 4-4d.
43401. *Cyclopora fungia* Prout. Plesiotypes and figured sections.  
43402. Warsaw (Miss.). Warsaw and Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 671, pl. 68, figs. 3-3g.
43400. *Cycloporella? perversa* Ulrich. Figured section of cotype.  
Keokuk (Miss.). Greene County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 676, pl. 69, figs. 3-3b.
43745. *Cycloporella spinifera* Ulrich. Figured sections of cotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 675, pl. 69, figs. 1a-1c.
45685. *Cyclora depressa* Ulrich. Cotypes.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 13, pl. 7, figs. 9, 9a.
115621. *Cyclostrema bicarinatum* Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 291, pl. 17, fig. 5.
112660. *Cyclostrema chipolanum* Dall. Holotype.  
Oligocene. Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 420, pl. 22, fig. 35.
38863. *Cyclus americana* Packard. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Packard, American Nat., XIX, 1885, p. 293; Mem. Nat. Acad. Sci., III, 1886, p. 143, pl. 5, figs. 1, 1a; pl. 6, figs. 4, 4a.
115435. *Cylichna ovum-lacerti* Guppy. Holotype.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 407, pl. 18, fig. 22.
282. *Cylichna scitula* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 178.-  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 276, pl. 31, figs. 3a, 3b.
281. *Cylichna? volvaria* (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 275, pl. 31, figs. 2a, 2b.  
See *Bulla volvaria*.



97478. **Cylichnella gabbi** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 59, fig. 12.  
See Tornatina (*Cylichnella*) *gabbi*.
111976. **Cylindrella (Gongylostoma) floridana** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 13,  
pl. 1, fig. 6a.
46550. **Cylindrocœlia covingtonensis** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 247.
46551. **Cylindrocœlia minnesotensis** Ulrich. Cotypes.  
46552. Black River (Ord.). Fountain, and Minneapolis, Minne-  
sota.  
Ulrich, Amer. Geol., III, 1889, p. 248.—Winchell and Schuchert,  
Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893,  
p. 78, pl. G, figs. 1-3.
46164. **Cymatonota attenuata** Ulrich. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 664, pl. 55, figs. 12-14.
46165. **Cymatonota constricta** Ulrich. Holotype.  
Richmond (Ord.). Hanover, Butler County, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 664, pl. 55, figs. 10, 11.
46166. **Cymatonota productifrons** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 665, pl. 55, figs. 17, 18.
46167. **Cymatonota recta** Ulrich. Cotypes.  
46168. Lorraine (Ord.). Newport, Kentucky; Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 662, pl. 55, figs. 8, 9.
46169. **Cymatonota semistriata** Ulrich. Holotype.  
Richmond (Ord.). Clarksville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 663, pl. 55, figs. 6, 7.
46170. **Cymatonota typicalis** Ulrich. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 662, pl. 55, figs. 1-5.  
See *Chænodomus typicalis*.
24646. **Cyphaspis? brevimarginatus** Walcott. Holotype.  
Upper Pogonip (Ord.). Ridge east of Hamburg Ridge  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 93, pl. 12, fig. 10.



41956. **Cyphaspis ? galenensis** Clarke. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 759, fig. 82.
43017. **Cyphaspis stephanophora** Hall and Clarke. Plastotype.  
Onondaga (Dev.). Canandaigua, New York.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 142, pl. 24, fig. 2.
9838. **Cyphosoma texanum** (Roemer). Plesiotypes.  
Fredericksburg (Lower Cret.). Leon Springs, Texas.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 145.  
= *Diplopodia texanum*.
43189. **Cyphotrypa acervulosa** (Ulrich). Figured sections of holotype.  
Trenton (Ord.). Decorah, Iowa.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 30, pl. 8, figs. 1-3.  
See *Leptotrypa acervulosa*.
43188. **Cyphotrypa frankfortensis** Ulrich and Bassler. Holotype and figured sections.  
Trenton (Ord.). Frankfort, Kentucky.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 30, pl. 8, figs. 7-9.
43192. **Cyphotrypa wilmingttonensis** Ulrich and Bassler. Holotype and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 31, pl. 8, figs. 4-6.
164928. **Cypræa chilona** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 39, figs. 1, 3.
135157. **Cypræa dalli** Aldrich. Holotype.  
Eocene. Red Bluff, Wayne County, Mississippi.  
Aldrich, The Nautilus, VII, No. 9, 1894, p. 98, pl. 4, fig. 2.
112073. **Cypræa heilprinii** Dall. Cotypes.  
114103. Oligocene. Ballast Point, Tampa, and Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 166, pl. 11, figs. 2, 2a.
114099. **Cypræa pinguis** Conrad. Plesiotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 164, pl. 11, figs. 1, 1a.



112209. *Cypræa* (*Siphocypræa*) *problematica* (Heilprin).  
 112210. Plesiotypes.  
 Pliocene. Caloosahatchie River, near Fort Thompson,  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 167,  
 pl. 5, figs. 10, 10b.
112441. *Cypræa willcoxi* Dall. Holotype.  
 Oligocene. Near Osprey, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 166,  
 pl. 5, figs. 12b, 12c.
3642. *Cypricardia acutifrons* Dana. Holotype.  
 Carboniferous. District of Illawarra, New South Wales,  
 Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 702, Atlas, pl. 8,  
 figs. 4a, 4b.
3646. *Cypricardia arcodes* Dana. Holotype.  
 Carboniferous. Harpers Hill on the Hunter, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 702, Atlas, pl. 8,  
 figs. 8a, 8b.
28941. *Cypricardia* ? *haguei* Stanton'. Cotypes.  
 Jurassic. Yellowstone National Park.  
 Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 623,  
 pl. 73, figs. 11-13.
3641. *Cypricardia imbricata* Dana. Cotypes.  
 Carboniferous. Harpers Hill on the Hunter, New South  
 Wales, Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 702, Atlas, pl. 8,  
 fig. 5.
15071. *Cypricardia occidentalis* Hall. Holotype.  
 Upper Carboniferous. Big Blue River, Kansas.  
 Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
 1852, p. 412, pl. 2, fig. 2.
3667. *Cypricardia prærupta* Dana. Holotype.  
 Carboniferous. District of Illawarra, New South Wales,  
 Australia.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 703, Atlas, pl. 8,  
 fig. 10.
3632. *Cypricardia simplex* Dana. Holotype.  
 Carboniferous. New South Wales.  
 Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 703, Atlas, pl. 9,  
 fig. 2.
13920. *Cypricardinia indenta* (Conrad). Plesiotypes.  
 Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 182, pl. 5, fig. 1,  
 pl. 15, fig. 11.



46176. **Cypricardites cingulata** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 235, fig. 21.  
=Cyrtodonta cingulata.
46544. **Cypricardites ferrugineum** Hall and Whitfield. Plastotype.  
Clinton (Sil.). Wilmington, Ohio.  
Hall and Whitfield, Geol. Surv. Ohio., Pal. II, 1875, p. 116, pl. 5,  
fig. 11.
46181. **Cypricardites germanus** Ulrich. Holotype.  
Trenton (Ord.). Near Danville, Kentucky.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 236, figs. 22a, b.  
=Cyrtodonta grandis germanus.
46178. **Cypricardites glabella** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 234, fig. 20.  
=Cyrtodonta glabella.
46182. **Cypricardites grandis** Ulrich. Cotypes.  
Trenton (Ord.). One and one-half miles south of Burgin,  
Kentucky.  
Ulrich, Amer. Geol., VI, 1890, p. 387, fig. 19; Nineteenth Ann.  
Rept. Geol. and Nat. Hist. Surv. Minn., 1892, p. 236, figs.  
22c-e.  
=Cyrtodonta grandis.
46326. **Cypricardites haynianus** (?) (Safford). Plesiotypes.  
Trenton (Ord.). Near Danville, Kentucky.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 240, figs. 25a, 25b.  
=Vanuxemia hayniana.  
See Cyrtodonta hayniana.
46307. **Cypricardites ? modestum** Ulrich. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 100, pl. 7, figs. 5-7.  
=Saffordia modesta.
46329. **Cypricardites nanus** Ulrich. Cotypes.  
Trenton (Ord.). One mile south of Burgin, Kentucky.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 239, figs. 24a-d.  
=Vanuxemia nana.



46330. **Cypricardites obtusifrons** Ulrich. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 233, fig. 18.  
= *Vanuxemia obtusifrons*.
46333. **Cypricardites sardesoni** Ulrich. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 231, fig. 16.  
= *Vanuxemia sardesoni*.
46193. **Cypricardites tenellus** Ulrich. Cotypes.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 237, fig. 23.  
= *Cyrtodonta tenella*.
46335. **Cypricardites terminalis** Ulrich. Cotype.  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 98, pl. 7, fig. 9.  
= *Vanuxemia terminalis*.
41812. **Cypridina herzeri** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 209, pl. 14,  
figs. 9a-c.
20260. **Cyprimeria ? crassa** Meek. Cotypes.  
Montana (Cret.). Popes Well, New Mexico.  
Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and  
Green Riv., Macomb, 1876, p. 128, pl. 1, figs 8a-c.
7848. **Cyprimeria ? subalata** Meek. Cotypes.  
Colorado (Cret.). East Canyon, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 158,  
pl. 15, fig. 7.  
= *Tellina ? subalata*.
1319. **Cyprimeria ? tenuis** (Meek). Cotypes.  
Nanaimo (Cret.). Near Nanaimo, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 361,  
pl. 2, fig. 5.  
See *Dosinia ? tenuis*.
192. **Cyprina arenaria** Meek and Hayden. Cotypes.  
Dakota (Cret.). Two miles above mouth of Big Sioux  
River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 143.  
= *Cyrena dakotensis*.



28939. *Cyprina* ? *cinnabarensis* Stanton. Cotypes.  
Jurassic. Cinnabar Mountain, Montana, and Yellowstone  
National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 621,  
pl. 73, figs. 7, 8.
306. *Cyprina compressa* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Moreau River, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 144  
= *Cyprina ovata compressa*.
457. *Cyprina cordata* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 143.  
= *Sphaeriola* ? *cordata*.
12362. *Cyprina* ? *dallii* White. Holotype.  
Lower Cretaceous? Fossil Point, Port Möller, Alaska.  
White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 14, pl. 6, fig. 1.
444. *Cyprina humilis* Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Branch of Cheyenne River, near  
Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 179.  
= *Veniella* ( *Venilicardia* ) *humilis*.
28940. *Cyprina* ? *iddingsi* Stanton. Holotype and paratypes.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 622,  
pl. 73, fig. 9.
23059. *Cyprina occidentalis* Whiteaves. Plesiotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 ( Feb., 1896 ), p. 60,  
pl. 12, fig. 2.
306. *Cyprina ovata* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Heart River, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 144.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 146, text  
fig. 8, pl. 29, figs. 7a-c.
306. *Cyprina ovata compressa* ( Meek and Hayden ). Holotype.  
Cretaceous. Mouth of Heart River, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 147, pl. 30, fig. 11.  
See *Cyprina compressa*.



361. *Cyprina subtumida* Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 144.  
= *Veniella subtumida*.
22883. *Cyrena æquilateralis* (Meek)? Plesiotypes.  
Colorado (Cret.). Bear River City, Wyoming.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 102, pl. 22,  
figs. 14, 15.
20100. *Cyrena brevidens* White. Cotypes.  
Puget (Cret.). Palace Camp, Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 58, pl. 10, figs. 8-11.
7877. *Cyrena carletoni* Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873),  
p. 495.—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr.,  
Pt. I, 1883, p. 20, pl. 12, figs. 16 a, b.
2133. *Cyrena* (*Corbicula*?) *cytheriformis* Meek and Hayden.  
2135. Holotype and paratypes.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 176.
192. *Cyrena dakotensis* Meek and Hayden. Cotypes.  
7901. Dakota (Cret.). Two miles above mouth of Big Sioux  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 159, pl. 1, figs.  
1a-d, 1f.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 436, pl. 4, figs. 3, 4.  
See *Cyprina arenaria*.
115030. *Cyrena* (*Pseudocyrena*) *dupliniana* Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1446, pl. 56, fig. 22.
7621. *Cyrena* (*Corbicula*) *durkeei* Meek. Cotypes.  
Bear River (Cret.). Limestone Hill, Bear River, Wyoming.  
Meek, Proc. Amer. Philos. Soc., XI, 1871, p. 431.  
= *Corbicula durkeei*.
8613. *Cyrena* (*Veloritina*) *durkeei* (Meek). Plesiotypes.  
Colorado (Cret.). West crossing of north fork of Virgin  
River, Utah.  
White, Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. I,  
1876, p. 207, pl. 21, 13a, b.  
[Not *Corbicula durkeei* Meek. T. W. Stanton.]
7840. *Cyrena* ? *holmesi* Meek. Cotypes.  
Fox Hills (Cret.). Ralston Creek, about four miles north  
of Golden, Colorado.  
Meek, Bull. U. S. Geol. & Geogr. Surv. Terr. (2), I, 1875, p. 45.  
= *Mactra* ? *holmesi*.



7822. **Cyrena inflexa** (Meek). Cotypes.  
 Colorado (Cret.). Below Gallatin City, Missouri River,  
 Montana.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
 p. 290, pl. 10, figs. 7a, 7b.—Stanton, Bull. No. 106, U. S. Geol.  
 Surv., 1893, p. 103, pl. 22, fig. 13.  
 See *Corbicula* (*Veloritina*) *inflexa*.
2131. **Cyrena intermedea** Meek and Hayden. Holotype.  
 Laramie (Cret.). Moreau River, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 116.  
 = *Corbicula nebrascensis*.
2132. **Cyrena moreauensis** Meek and Hayden. Cotypes.  
 Laramie (Cret.). Moreau River, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 115.  
 = *Corbicula subelliptica moreauensis*.
2134. **Cyrena occidentalis** Meek and Hayden. Holotype and paratype.  
 Laramie (Cret.). Bad Lands of Judith River, Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 116.  
 = *Corbicula occidentalis*.
109315. **Cyrena pompholyx** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner, Free Inst. Sci. Phila., III, Pt. V, 1900, pl.  
 38, figs. 7, 8; Pt. VI, 1903, p. 1445.
22884. **Cyrena** (*Veloritina*) **securis** (Meek). Plesiotypes.  
 22885. Colorado (Cret.). Bear River City, and near Hilliard,  
 22886. Wyoming.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 101, pl. 23,  
 figs. 1-3.
8073. **Cyrena securis** (Meek). Plesiotype.  
 Cretaceous. Hilliard Station, Wyoming.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
 p. 289, pl. 3, figs. 2a-c.
157506. **Cyrenoida caloosaensis** Dall. Holotype.  
 Pliocene. Caloosahatchie River, Florida.  
 Dall, The Nautilus, X, 1896, p. 52; Trans. Wagner Free Inst. Sci.  
 Phila., III, Pt. VI, 1903, p. 1335, pl. 51, fig. 5.
5898. **Cyrtina billingsi** Meek. Holotype.  
 Middle Devonian. Clear Water River, Mackenzie River  
 Basin, Canada.  
 Meek, Trans. Chicago Acad. Sci., 1, 1868, p. 97, pl. 14, figs. 6a-h.



13872. **Cyrtina davidsoni** Walcott. Cotypes.  
Upper Devonian. White Pine District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 146, pl. 3, figs. 2-2e.
24426. **Cyrtina hamiltonensis** (Hall). Plesiotypes.  
24427. Base of Upper Devonian. Porcupine River and the Ram-  
parts, Mackenzie River, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 99, pl. 14, figs. 5a, 5b,  
10a, 10b.  
See *Cyrtina panda*.
24428. **Cyrtina panda** Meek. Holotype.  
Base of Upper Devonian. Onion River, Mackenzie River  
Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 100, pl. 14, figs. 8a-d.  
= *Cyrtina hamiltonensis*.
28198. **Cyrtoceras baffinensis** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 171, pl. 14,  
figs. 11-13.
14178. **Cyrtoceras cessator** Hall and Whitfield. Holotype.  
Lower Carboniferous. Near Eberhardt Mills, White Pine  
District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 278, pl. 6, fig. 15.
28121. **Cyrtoceras cornulum** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 170, pl. 14,  
figs. 8-10.
46525. **Cyrtoceras minneapolis** Clarke. Cotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 808, pl. 59, figs. 7, 8.
13987. **Cyrtoceras nevadense** Walcott. Holotype.  
Middle Devonian. Combs Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 203, pl. 17, figs.  
7, 7a.
46526. **Cyrtocerina? schoolcrafti** Clarke. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 774, pl. 47, figs. 12-14.
46171. **Cyrtodonta affinis** Ulrich. Holotype.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1894, p. 540, pl. 39, figs. 20-22.



46172. **Cyrtodonta affinis fillmorensis** Ulrich. Holotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 540, pl. 39, fig. 23.
46173. **Cyrtodonta ampla** Ulrich. Holotype.  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 538, pl. 39, fig. 34.
46174. **Cyrtodonta billingsi** Ulrich. Cotype.  
46175. Stones River (Ord.). Cannon Falls, Minnesota; Dunleith,  
Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 538, pl. 40, figs. 2-6.
46176. **Cyrtodonta cingulata** (Ulrich). Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 545, pl. 40, figs. 7, 8.  
See *Cypricardites cingulata*.
46228. **Cyrtodonta gantii** Safford. Cotypes.  
Trenton (Ord.). Wilson County, Tennessee.  
Safford, Geol. Tenn., 1869, Pl. E, figs. 1a-d.  
= *Modiolodon gantii*.
46177. **Cyrtodonta gibbera** Ulrich. Holotype.  
Trenton (Ord.). Thirteen miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 542, pl. 39, figs. 13-15.
28161. **Cyrtodonta(?) gibbera** Ulrich var. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 162, pl. 13, figs.  
34-36.
46178. **Cyrtodonta glabella** (Ulrich). Holotype and plesiotypes.  
to Black River (Ord.). Minneapolis, Minnesota.  
46180. Stones River (Ord.). Beloit, Wisconsin; Dunleith, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 543, pl. 39, figs. 37-40.  
See *Cypricardites glabella*.
46182. **Cyrtodonta grandis** (Ulrich). Cotypes and plesiotypes.  
46859. Trenton (Ord.). One and one-half miles south of Burgin,  
Kentucky; Pleasant Grove, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 547, figs. 43a-i; pl. 40, fig. 11.  
See *Cypricardites grandis*.



46181. **Cyrtodonta grandis germanus** (Ulrich). Holotype  
 46862. and plesiotype.  
 Trenton (Ord.). Near Danville, Kentucky; Goodhue  
 County, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 547, fig. 43j; pl. 40, figs. 9, 12.  
 See Cypricardites germanus.
46183. **Cyrtodonta grandis intermedia** Ulrich. Cotype.  
 Trenton (Ord.). Haynies Mill, Smith County, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 547, fig. 43k.
46324. **Cyrtodonta hayniana** Safford. Cotypes.  
 Trenton (Ord.). Haynies, Tennessee.  
 Safford, Geol. Tenn., 1869, pl. F, figs. 1d, e.  
 = Vanuxemia hayniana.  
 See Cypricardites haynianus?
46184. **Cyrtodonta obesa** Ulrich. Cotypes.  
 46185. Black River (Ord.). Mercer County, Kentucky; St. Paul,  
 Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 542, pl. 39, figs. 8-12.
46186. **Cyrtodonta oviformis** Ulrich. Holotype.  
 Stones River (Ord.). Janesville, Wisconsin.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 544, pl. 39, fig. 46; pl. 40, fig. 1.
46187. **Cyrtodonta parva** Ulrich. Holotype.  
 Trenton (Ord.). Near Fountain, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 541, pl. 39, figs. 24, 25.
46188. **Cyrtodonta persimilis** Ulrich. Cotypes.  
 46189. Stones River (Ord.). Minneapolis, Minnesota; Beloit,  
 Wisconsin.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 544, pl. 39, figs. 41-44.
46190. **Cyrtodonta rotulata** Ulrich. Cotypes.  
 46855. Black River (Ord.). Mercer County, Kentucky; Foun-  
 tain, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 541, pl. 39, figs. 16-19.
46191. **Cyrtodonta saffordi** (Hall). Plesiot.  
 Trenton (Ord.). Nashville, Tennessee.  
 Safford, Geol. Tenn., 1869, pl. F, fig. 2d.



28159. **Cyrtodonta sillimanensis** Ulrich. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Ulrich, Proc. U. S. Nat. Mus., XXII, 1900, p. 162, pl. 13, figs.  
31-33.
46192. **Cyrtodonta subovata** Ulrich. Cotypes.  
46849. Stones River (Ord.). High Bridge, Kentucky.  
46851. Black River (Ord.). St. Paul and Cannon Falls, Minne-  
46852. sota; Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 536, pl. 39, figs. 28-33, 45.  
= *Cyrtodonta huronensis*.
46193. **Cyrtodonta tenella** (Ulrich). Cotypes.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 546, pl. 40, figs. 15-19.  
See *Cypricardites tenellus*.
45783. **Cyrtolites carinatus** Miller. Plesiotypes.  
Utica (Ord.). Newport, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 862, pl. 62, figs. 50-52.
- 45949 **Cyrtolites cristatus** Safford. Cotypes.  
to Trenton (Ord.). Nashville, Jackson County, and Lind-  
45951. sleys Hill, near Lebanon, Tennessee.  
Safford, Geol. Tenn., 1867, p. 289.  
= *Oxydiscus cristatus*.
45784. **Cyrtolites dilatatus** Ulrich and Scofield. Cotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 865, pl. 62, figs. 24-26.
45785. **Cyrtolites disjunctus** Ulrich and Scofield. Holotype.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 864, pl. 62, figs. 48, 49.
45793. **Cyrtolites nitidulus** Ulrich. Holotype.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 12, pl. 7,  
figs. 7, 7a.  
= *Cyrtolitina nitidula*.
17898. **Cyrtolites ornatus** Conrad? Plesiotype.  
Black River (Ord.). Three miles above Fort Snelling,  
Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 2B., fig. 1.



45786. **Cyrtolites ornatus** Conrad. Plesiotypes.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 860, pl. 62, figs. 27, 28.
45787. **Cyrtolites ornatus minor** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 861, pl. 62, figs. 30, 31.
45788. **Cyrtolites parvus** Ulrich. Holotype.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 864, pl. 62, figs. 45-47.
45789. **Cyrtolites retrorsus** Ulrich. Cotypes.  
45790. Trenton (Ord.). Hartsville, Tennessee, and one mile south of Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 861, pl. 62, figs. 32-37.
45791. **Cyrtolites retrorsus fillmorensis** Ulrich and Scofield. Cotypes.  
Black River (Ord.). Near Fountain, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, pl. 62, figs. 38, 39.
17363. **Cyrtolites sinuatus** Hall and Whitfield. Holotype.  
Upper Pogonip (Ord.). Pogonip Mountain, White Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 237, pl. 1, figs. 23-24.—Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 84.
45792. **Cyrtolites subplanus** Ulrich. Cotypes.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 862, pl. 62, figs. 40-44.
45793. **Cyrtolitina nitidula** (Ulrich). Plesiotypes.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 866, pl. 62, figs. 53-55.  
See *Cyrtolites nitidulus*.
41952. **Cyrtometopus scofieldi** Clarke. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 735, fig. 55.
45794. **Cyrtospira bicurvata** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, P 1897, p. 1074, pl. 81, figs. 21, 22.



46053. **Cyrtospira tortilis** Ulrich. H  
 Stones River (Ord.). Murfreesboro, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., I  
 1897, p. 1074, pl. 81, figs. 24, 25.
45795. **Cyrtospira wykoffensis** Ulrich and Scofield. H  
 Trenton (Ord.). Wykoff, Minnesota.  
 Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn.  
 Rept., III, Pt. II, 1897, p. 1074, pl. 81, fig. 23.
14546. **Cysteophyllum americanum arcticum** Meek. C  
 Base of Upper Devonian. Onion River, Mackenz  
 Basin, Canada.  
 Meek, Trans. Chicago Acad. Sci., I, 1868, p. 80, pl. 11, 1
43396. **Cystodictya americana** Ulrich. C  
 Keokuk (Miss.). Kings Mountain Tunnel, Kent  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 494, pl. 76, figs.
43651. **Cystodictya gilberti** (Meek). Ple  
 Onondaga (Dev.). Falls of the Ohio.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 320, pl. 43, fig.  
 See *Stictopora gilberti*.
43399. **Cystodictya hamiltonensis** Ulrich. H  
 Middle Devonian. Buffalo, Iowa.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 493, pl. 42, fig  
 fig. 1.
43652. **Cystodictya lineata** Ulrich. Cotypes and figured  
 Keokuk (Miss.). Kings Mountain Tunnel, Kent  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p.  
 figs. 4-4c.
43398. **Cystodictya lineata st. ludovicii** Ulrich. H  
 St. Louis (Miss.). St. Louis, Missouri.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 492.
43650. **Cystodictya ocellata** Ulrich. Holotype and  
 Keokuk? (Miss.). Somerset, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p.  
 figs. 3-3a.
43397. **Cystodictya pustulosa** Ulrich. H  
 Keokuk (Miss.). Kings Mountain, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 495, pl. 76, figs.
43497. **Cystodictya zigzag** Ulrich.  
 Waverly (Miss.). Richfield, Ohio.  
 Ulrich, Bull. Denison Univ., IV, 1888, p. 81, pl. 13, fig



107143. *Cythara gibba* Guppy. Holotype.  
107144. Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 306, pl. 27, fig. 9.
107145. *Cythara guppyi* Dall. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 306, pl. 27, fig. 5.
163985. *Cythara metria* Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III Pt. VI, 1903, pl. 60, fig. 13.
163993. *Cythara micromeris* Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, fig. 16.
107087. *Cythara mucronata* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 306, pl. 27, fig. 6.
107088. *Cythara obtusa* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 306, pl. 27, fig. 7.
97338. *Cythara terminula* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 38, pl. 2, fig. 5.
35411. *Cythere burnsi* Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 103, pl. 36, figs. 34-39.
35412. *Cythere calverti* Ulrich and Bassler. Holotype.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 100, pl. 38, figs. 11-13.
35413. *Cythere clarkana* Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 98, pl. 35, figs. 1-10.
35414. *Cythere clarkana minuscula* Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 99, pl. 35, figs. 11-14.



35415. **Cythere dorsicornis** Ulrich and Bassler. H  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, fig. 16.
35416. **Cythere dorsicornis bicornis** Ulrich and Bassler. H  
Choptank (Miocene). Pawpaw Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 38, figs. 32-33.
35417. **Cythere evax** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, figs. 6-8.
35418. **Cythere evax oblongula** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, figs. 9, 10.
35419. **Cythere exanthemata** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, figs. 1-5.
35420. **Cythere francisca** Ulrich and Bassler. H  
Choptank (Miocene). Peach Blossom Creek, the  
southwest of Easton, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 38, figs. 19-21.
35421. **Cythere inæquivalvis** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 35, figs. 15-17.
35422. **Cythere lienenklausi** Ulrich and Bassler. H  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 38, fig. 31.
35423. **Cythere martini** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, figs. 11-15.
41803. **Cythere marylandica** Ulrich. H  
Eocene. Sunnyside, Maryland.  
Ulrich, Maryland Geol. Surv., Eocene, 1901, p. 119,  
16-18.
35424. **Cythere micula** Ulrich and Bassler.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1901,  
pl. 36, figs. 18-20.



21708. ***Cythere nebrascensis*** Geinitz. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor  
County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 30, pl. 4, fig. 20.
35425. ***Cythere nitidula*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 107,  
pl. 36, figs. 21-23.
25426. ***Cythere nitidula calvertensis*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 108,  
pl. 36, figs. 24, 25.
35427. ***Cythere paucipunctata*** Ulrich and Bassler. Holotype.  
Choptank (Miocene). Peach Blossom Creek, three miles  
southwest of Easton, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 105,  
pl. 38, figs. 7-9.
35428. ***Cythere planibasalis*** Ulrich and Bassler. Holotype.  
Chesapeake (Miocene). James River, Virginia.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 99,  
pl. 38, figs. 1-3.
35429. ***Cythere plebeia*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 102,  
pl. 35, figs. 20-29.
35430. ***Cythere plebeia capax*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 103,  
pl. 35, figs. 30-33.
35431. ***Cythere plebeia modica*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 103,  
pl. 35, figs. 18, 19.
35432. ***Cythere porcella*** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 106,  
pl. 36, figs. 26-33.
35433. ***Cythere producta*** Ulrich and Bassler. Holotype.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 115,  
pl. 36, fig. 17; pl. 38, figs. 28-30.



35434. **Cythere punctistriata** Ulrich and Bassler. Cotypes.  
 35435. Choptank (Miocene). Peach Blossom Creek, three miles southwest of Easton, Maryland.  
 Calvert (Miocene). Church Hill, Maryland.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 108, pl. 38, figs. 22-24.
35436. **Cythere rugipunctata** Ulrich and Bassler. Holotype.  
 Chesapeake (Miocene). James River, Virginia.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 118, pl. 38, figs. 16, 17.
35437. **Cythere (?) shattucki** Ulrich and Bassler. Holotype.  
 Choptank (Miocene). Pawpaw Point, Maryland.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 121, pl. 38, fig. 10.
35438. **Cythere spiniplicata** Ulrich and Bassler. Holotype.  
 Calvert (Miocene). Plum Point, Maryland.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 120, pl. 38, fig. 18.
35439. **Cythere subovalis** Ulrich and Bassler. Holotype.  
 Choptank (Miocene). Pawpaw Point, Maryland.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 111, pl. 38, figs. 14, 15.
35440. **Cythere toumeyii** Ulrich and Bassler. Cotypes.  
 35441. Choptank (Miocene). Peach Blossom Creek, three miles southwest of Easton, Maryland.  
 Chesapeake (Miocene). Yorktown, Virginia.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 105, pl. 38, figs. 4-6.
35442. **Cythere vughani** Ulrich and Bassler. Holotype.  
 Chesapeake (Miocene). James River, Virginia.  
 Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 109, pl. 38, figs. 25-27.
114754. **Cytherea cæsarina** Dall. Holotype.  
 Chipola (Oligocene). Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1275, pl. 53, fig. 5.
115552. **Cytherea (Circe) carbasea** Guppy. Holotype.  
 Miocene. Jamaica, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 292, pl. 18, fig. 13.
341. **Cytherea deweyi** Meek and Hayden. Cotypes.  
 Montana (Cret.). Moreau River, South Dakota, and Yellowstone River, Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 83.  
 = *Callista (Dosiniopsis) deweyi*.



63337. **Cytherea (Artena) glyptoconcha** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1277, pl. 55, fig. 24.
15549. **Cytherea juncea** Guppy. Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 582, pl. 26, fig. 13.
9853. **Cytherea leonensis** Conrad. Holotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 153, pl. 6, fig. 1.
343. **Cytherea nebrascensis** Meek and Hayden. Cotypes.  
Montana (Cret.). Cheyenne and Moreau rivers, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 83.  
= *Callista (Dosiniopsis) nebrascensis*.
9905. **Cytherea nuttali** Conrad. Holotype.  
Eocene. East of Frontera, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 162, pl. 4, fig. 5.
176. **Cytherea owenana** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 273.  
= *Callista owenana*.
418. **Cytherea pellucida** Meek and Hayden. Holotype and  
paratypes.  
Fort Pierre (Cret.). Missouri River, Montana, two hundred miles above Milk River.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 272.  
= *Callista ? pellucida*.
15550. **Cytherea (Callista) planivieta** Guppy. Holotype.  
15551. Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 292, pl. 18, fig. 3.
99236. **Cytherea (Artena) shepardi** Dall. Holotype.  
Oligocene. Near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1278, pl. 55, fig. 16.
99233. **Cytherea tarquinia** (Dall). Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1274.  
**See Venus tarquinia.**



9850. *Cytherea texana* Conrad. Holotype.  
Washita (Lower Cret.). Between El Paso and Frontera,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 153, pl. 6, fig. 2.
136468. *Cytherea (Ventricola) ucuttana* Dall. Holotype.  
Red Bluff (Eocene). Ucutta Creek, Clarke County, Ala-  
bama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1276, pl. 57, fig. 14.
109234. *Cytherea willcoxi* Dall. Holotype.  
Pliocene. Caloosahatchie River, near site of old Fort  
Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1276, pl. 53, fig. 3.
35451. *Cythereis alaris* Ulrich and Bassler. Holotype.  
Chesapeake (Miocene). James River, Virginia.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 123,  
pl. 38, figs. 34-36.
41801. *Cythereis bassleri* Ulrich. Cotypes.  
Eocene. Upper Marlboro, Maryland.  
Ulrich, Maryland Geol. Surv., Eocene, 1901, p. 120, pl. 16, figs.  
19-21.
35452. *Cythereis cornuta americana* Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 122,  
pl. 37, figs. 29-33.
41800. *Cytherella marlboroensis* Ulrich. Cotypes.  
Eocene. Upper Marlboro, Maryland.  
Ulrich, Maryland Geol. Surv., Eocene, 1901, p. 117, pl. 16, figs.  
9-13.
41805. *Cytherella ovatiformis* Ulrich. Cotypes.  
Chester (Miss.). Grayson Springs Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 17, figs.  
3, 4a-c.
41802. *Cytherella ? rugosa* Jones. Plesiotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 686, pl. 43, figs. 21-24.
41803. *Cytherella ? rugosa arcta* Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 686, pl. 43, fig. 25.



41807. **Cytherella submarginata** Ulrich. Holotype.  
Eocene. Upper Marlboro, Maryland.  
Ulrich, Maryland Geol. Surv., Eocene, 1901, p. 118, pl. 16, figs. 14, 15.
41808. **Cytherella? subrotunda** Ulrich. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 685, pl. 44, fig. 43.
35444. **Cytheridea (?) chesapeakensis** Ulrich and Bassler. Holotype.  
Calvert (Miocene.) Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 125, pl. 37, fig. 9.
41804. **Cytheridea perarcuata** Ulrich. Holotype.  
Eocene. Potomac Park, Maryland.  
Ulrich, Maryland Geol. Surv., Eocene, 1901, p. 121, pl. 16, figs. 22, 23.
35445. **Cytheridea subovata** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 124 pl. 37, figs. 1-8.
35446. **Cytherideis ashermani** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 126, pl. 37, figs. 10-16.
35447. **Cytherideis cylindrica** Ulrich and Bassler. Holotype.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 126, pl. 37, fig. 17.
35448. **Cytherideis longula** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 128, pl. 37, figs. 21-27.
35449. **Cytherideis semicircularis** Ulrich and Bassler. Cotypes.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 127, pl. 37, figs. 18-20.
35450. **Cytherideis subæqualis** Ulrich and Bassler. Holotype.  
Calvert (Miocene). Plum Point, Maryland.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 127, pl. 37, fig. 28.
35443. **Cytheropteron nodosum** Ulrich and Bassler. Holotype.  
Chesapeake (Miocene). James River, Virginia.  
Ulrich and Bassler, Maryland Geol. Surv., Miocene, 1904, p. 129, pl. 38, figs. 37-40.



- 26275 **Dactyloidites asteroides** (Fitch). Plesiotypes.  
to Lower Cambrian. Middle Granville, New York.  
26280. Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 605, pl. 58,  
fig. 1; Mon. XXX, U. S. Geol. Surv., 1898, p. 41, text fig.  
15, pls. 24-26; pl. 27, figs. 3, 6; pl. 28, fig. 5.
20136. **Dalliconcha ensiformis** (Conrad). Plesiotype.  
Ripley (Cret.). Alabama.  
White, Proc. Acad. Nat. Sci. Phila., for 1887, p. 37, pl. 2, fig. 6.  
= *Gervilliopsis ensiformis*.
20135. **Dalliconcha invaginata** White. Cotypes.  
Washita (Lower Cret.). Two miles north of Fort Worth,  
Texas.  
White, Proc. Acad. Nat. Sci. Phila., for 1887, p. 35, pl. 2, figs. 4, 5.  
= *Gervilliopsis invaginata*.
34116. **Dalmanella subcarinata** (Hall). Plesiotypes.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian  
Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 561, pl.  
70, figs. 1a-1g.
- Dalmania paituna** Hartt and Rathbun. See *Dalmanites paituna*.
23885. **Dalmanites australis** Clarke. Plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 29, pl. 2,  
figs. 11, 13.
23884. **Dalmanites gemellus** Clarke. Plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 38, pl. 2,  
fig. 14.
28170. **Dalmanites (Pterygometopus) goodridgii** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 174, pl. 12,  
figs. 5, 6.
13993. **Dalmanites meeki** Walcott. Cotypes.  
13994. Middle Devonian. Three miles south of Piñon Pass.  
13995. Piñon Range, and Eureka District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 4,  
pl. 1, figs. 11, 11a (as *Dalmanites* sp. undet.).—Walcott, Mon.  
VIII, U. S. Geol. Surv., 1884, p. 207, pl. 17, figs. 5-5c.  
= *Hausmannia meeki*.
24343. **Dalmanites paituna** Hartt and Rathbun. Cotypes.  
Middle Devonian. Itareré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 111.



23875. **Dalmanites (Cryphaeus) paituna** Hartt and Rathbun. Cotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 39, pl. 1, fig. 13.
30189. **Daonella böchiformis** Hyatt. Cotypes.  
Triassic. Sailors Canyon, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 415.
30191. **Daonella cardinoides** Hyatt. Cotypes.  
Triassic. Sailors Canyon, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 416.
30190. **Daonella (?) subjecta** Hyatt. Cotypes.  
Triassic. Sailors Canyon, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 415.
113176. **Daphnella cingulata** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 38, pl. 2, fig. 3.
97340. **Daphnella elata** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 224, pl. 21, fig. 1.
97341. **Daphnella modesta** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 39, pl. 2, fig. 4.
43187. **Dekayella foliacea** Ulrich and Bassler. Holotype and figured sections.  
Trenton (Ord.). Lexington, Kentucky.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 28, pl. 7, figs. 10-12.
43659. **Dekayella obscura** Ulrich. Cotypes and figured sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 89, pl. 1, figs. 4-4b.
43528. **Dekayella prænuntia** Ulrich. Holotype and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 270, pl. 23, fig. 43.
43530. **Dekayella prænuntia echinata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Near Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 271, pl. 23, figs. 32-38



43531. *Dekayella prænuntia multipora* Ulrich. Holotype and  
figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 272, pl. 23, figs. 44-47.
43532. *Dekayella prænuntia nævigera* Ulrich. Holotype.  
Black River (Ord.). Lanesboro, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 271.
43529. *Dekayella prænuntia simplex* Ulrich. Cotypes and  
figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 271, pl. 23, figs. 39-42.
43655. *Dekayia appressa* Ulrich. Holotype and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 152, pl. 6,  
figs. 7, 7a, 7b.
43307. *Dekayia devonica* Ulrich. Cotypes and figured sections.  
43308. Onondaga (Dev.). Falls of the Ohio.  
Hamilton (Dev.). Eighteen Mile Creek, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 416, pl. 45, figs. 5-5d.
43656. *Dekayia multispinosa* Ulrich. Holotype and figured  
sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 154, pl. 6,  
figs. 8, 8a.
43658. *Dekayia paupera* Ulrich. Holotype and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 153, pl. 6,  
figs. 10, 10a.  
= *Heterotrypa paupera*.
43657. *Dekayia pelliculata* Ulrich. Figured section of holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 150, pl. 6,  
figs. 9, 9a.
43660. *Dekayia trentonensis* Ulrich. Holotype.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 151, pl. 6,  
figs. 7, 7a, 7b.  
= *Dekayella trentonensis*.
17924. *Delthyris eruteines* Owen. Cotypes.  
Middle Devonian. Pine Creek, Iowa.  
Owen, Rept. Geol. Expl. Iowa, Wis., and Ill., 1844, pl. ii (12),  
fig. 9.  
= *Spirifer euryteines*.



42103. **Dendrocrinus? curtus** Ulrich. Holotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 18, pl. 7,  
fig. 14.  
= *Merocrinus curtus*.
158468. **Dendrophyllia lisbonensis** Vaughan. Holotype.  
Lisbon (Eocene). Lisbon, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 191, pl. 22,  
figs. 20-20c.
158472. **Dendrophyllia striata** Vaughan. Holotype.  
Lower Claiborne (Eocene). Mount Lebanon, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 191, pl. 22,  
figs. 19-19b.
112739. **Dentalium agile oleacinum** Dall. Cotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 441.
112745. **Dentalium caduloide** Dall. Holotype.  
Miocene. Near St. Marys, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 442,  
pl. 23, fig. 25.
23063. **Dentalium californicum** Stanton. Holotype and paratypes.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 62, pl. 12, fig. 3.
112741. **Dentalium caloosaense** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
441, pl. 23, fig. 24.
8473. **Dentalium canna** White. Cotypes.  
Upper Carboniferous. Near Salt Lake, New Mexico, and  
Relief Spring, Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv., W. 100th Merid., 1874,  
p. 23; Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. I,  
1877, p. 156, pl. 12, figs. 6a, 6b.
296. **Dentalium fragilis** Meek and Hayden. Cotypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 69.  
= *Dentalium gracile*.
296. **Dentalium gracile** Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 266, pl. 18,  
figs. 13a-d.  
See *Dentalium fragilis*.



12299. **Dentalium gracile** Hall and Meek Plesiotype.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 438, pl. 12, fig. 26.
4270. **Dentalium komooksense** Meek. Holotype.  
Nanaimo (Cret.). Nanaimo?, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 364,  
pl. 3, fig. 6.  
= *Dentalium nanaimoense*.
4270. **Dentalium nanaimoensis** Meek. Holotype.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 44.  
See *Dentalium komooksense*.
311. **Dentalium pauperculum** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 178.  
= *Entalis?* *paupercula*.
112742. **Dentalium prisma** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 442, pl. 15, fig. 5.
677. **Dentalium ? subquadratum** Meek. Cotypes.  
Jurassic. Red Buttes, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 311; Pal.  
Upp. Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864,  
p. 111, text fig.—Meek, Rept. Expl. Great Basin, Utah, Simp-  
son, 1876, p. 357, pl. 3, figs. 1a-c.
- Depranella. See *Drepanella*.
24358. **Derbya correana** Derby. Plesiotypes.  
Upper Carboniferous. Itaituba, Brazil.  
Hall and Clarke, Nat. Hist. New York, Pal. VIII, Pt. I, 1892,  
pl. 20, figs. 10, 11.  
= *Orthotetes correana*.
45561. **Derbya kaskaskiensis** McChesney. Plesiotype.  
Chester (Miss.). One mile west of Montgomery Switch,  
Caldwell County, Kentucky.  
Hall and Clarke, Nat. Hist. New York, Pal. VIII, Pt. I, 1892,  
pl. 11B, fig. 6.  
= *Orthotetes kaskaskiensis*.
23087. **Desmoceras californicum** Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 76,  
pl. 15, figs. 6, 7.



43293. **Diamesopora communis** Ulrich. Cotypes and figured sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 469, pl. 39, fig. 3a; pl. 41, figs. 5-5b.  
= *Cœloclema commune*.
43294. **Diamesopora trentonensis** Ulrich. Cotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 330, pl. 28, fig. 14.  
= *Cœloclema trentonense*.
43292. **Diamesopora vaupeli** Ulrich. Cotypes and figured sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 468, pl. 39, figs. 3, 3b; pl. 41, figs. 4, 4c.  
= *Cœloclema alternatum*.
24341. **Diaphorostoma darwini** Clarke. Cotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 32, pl. 4, fig. 19.
24339. **Diaphorostoma furmanianum** (Hartt and Rathbun). Plesiotypes.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 32, pl. 4, figs. 11, 12, 13.  
See *Holopea furmaniana*.
43266. **Diastoporina flabellata** Ulrich. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 122, pl. 2, figs. 2, 3; Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 178, figs. 5a-b.
24567. **Dicellocephalus? angustifrons** Walcott. Cotypes.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 42, pl. 10, figs. 1-1b.
24568. **Dicellocephalus bilobatus** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 226, pl. 2, fig. 36.—Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 40.
15450. **Dicellocephalus? expansus** Walcott. Holotype.  
Middle Cambrian. Prospect Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 45, pl. 9, fig. 19.  
= *Olenoides? expansus*.



24563. *Dicellocephalus finalis* Walcott. Cotypes.  
Upper Pogonip (Ord.). Ridge east of Hamburg Ridge,  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 89, pl. 12, figs.  
12, 12a, 22.
24569. *Dicellocephalus flabellifer* Hall and Whitfield. Cotypes.  
Upper Cambrian. West side of Pogonip Mountain, White  
Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 227, pl. 2, figs. 29, 30.
8563. *Dicellocephalus?* *flagricaudus* White. Cotypes.  
15452. Middle Cambrian. Schellbourne, Schell Creek Range,  
Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 12; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 60, pl. 3, figs. 8a, 8b.  
= *Zacanthoides flagricaudus*.  
See *Olenoides?* *flagricaudus*.
15447. *Dicellocephalus?* *gothicus* Hall and Whitfield. Holotype.  
Middle Cambrian. Canyon above Calls Fort, Wahsatch  
Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 242, pl. 1, fig. 36.  
= *Olenoides wahsatchensis*.  
See *Dicellocephalus wahsatchensis*.
24564. *Dicellocephalus inexpectans* Walcott. Cotypes.  
Lower Pogonip (Ord.). Ridge east of Hamburg Ridge,  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 90, pl. 1, fig. 10.
24566. *Dicellocephalus iole* Walcott. Cotypes.  
Upper Cambrian. Near Bullwhacker Mine, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 43, pl. 10, fig. 19.
17870. *Dicellocephalus iowensis* Owen. Cotypes.  
Middle Cambrian. Below mouth of Miniskah River,  
Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 573,  
pl. 1, fig. 4.  
= *Crepicephalus?* *iowensis*.
24565. *Dicellocephalus marica* Walcott. Cotypes.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 44, pl. 10, fig. 13.



17872. **Dicellosephalus miniscaensis** Owen. Cotype.  
Middle Cambrian. Near mouth of Miniskah River, Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 574, pl. 1A, fig. 5.  
= *Ptychaspis miniscaensis*.
17863. **Dicellosephalus minnesotensis** Owen. Cotypes.  
Upper Cambrian. Lake St. Croix, above Stillwater, Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 574, pl. 1, figs. 1, 2, 10.  
See *Dicellosephalus pepinensis*.
24640. **Dicellosephalus multicinctus** Hall and Whitfield. Holotype.  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 226, pl. 2, fig. 37.
24607. **Dicellosephalus nasutus** Walcott. Cotypes.  
Middle Cambrian. New York Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 40, pl. 10, fig. 15.  
= *Anomocare nasutus*.
24659. **Dicellosephalus osceola** Hall. Plesiotype.  
Upper Cambrian. North of Dunderberg Mine, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 40, pl. 9, fig. 25.
17867. **Dicellosephalus pepinensis** Owen. Cotypes.  
17868. Upper Cambrian. La Grange Mountain, head of Lake Pepin, Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 574, pl. 1, figs. 9a, 9b; pl. 1A, fig. 7. (Also pl. 1, fig. 10 as *D. minnesotensis*.)
15448. **Dicellosephalus quadriceps** Hall and Whitfield. Cotypes.  
Middle Cambrian. Ute Peak, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 240, pl. 1, figs. 37-40.  
= *Olenoides quadriceps*.
15449. **Dicellosephalus quadriceps** Hall and Whitfield. Plesiotypes.  
Middle Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 45, pl. 9, fig. 24.  
= *Olenoides quadriceps*.



24616. **Dicellocephalus richmondensis** Walcott. Cotypes.  
Middle Cambrian. New York Canyon, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 41, pl. 10, fig. 7.  
= *Ptychoparia richmondensis*.
15447. **Dicellocephalus wahsatchensis** Hall and Whitfield. Cotypes.  
Middle Cambrian. Canyon above Calls Fort, Wahsatch  
Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th, Par. IV, Pt.  
II, 1877, p. 241, pl. 1, fig. 35.  
= *Olenoides wahsatchensis*.  
See *Dicellocephalus gothicus*.
1025. **Dicellomus nanus** (Meek and Hayden). Cotypes.  
Upper Cambrian. Central portions of Black Hills, South  
Dakota.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 447,  
pl. 60, figs. 3b, 3d.  
See *Obolella nana*.
35209. **Dicellomus nanus** (Meek and Hayden). Plesiotypes.  
35210. Gallatin (Upper Cambrian). Gallatin Range, Yellowstone  
National Park, and Little Rocky Mountains, Montana.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 447, pl.  
60, figs. 3, 3a, 3c.  
See *Obolella nana*.
35211. **Dicellomus politus** (Hall). Plesiotypes.  
Middle Cambrian. Wisconsin.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 446, pl.  
60, figs. 4, 4a.
158300. **Dichocœnia alabamensis** Vaughan. Holotype.  
Midway (Eocene). Prairie Creek, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 139, pl. 15,  
figs. 4-4c.
35092. **Dichocrinus inornatus** Wachsmuth and Springer. Plesiotype.  
Kinderhook (Miss.). Quarry, Marshall County, Iowa.  
Grabau, Amer. Journ. Sci. (4), XVI, 1903, p. 297, figs. 9, 10 on  
p. 298.
43749. **Dichotrypa elegans** Ulrich. Cotypes.  
St. Louis (Miss.). Elizabethtown, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 500, pl. 76, figs. 8, 8b, 8c, 8d.
43387. **Dichotrypa foliata** Ulrich. Cotypes.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 499, pl. 42, figs. 2-2g.



44088. **Dichotrypa grandis** Ulrich.      Figured sections of holotype.  
Niagaran (Sil.).    Near Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 498, pl. 42, figs. 1b-1e.
43748. **Dichotrypa intermedia** Ulrich.      Figured sections of cotypes.  
St. Louis (Miss.).    Alton, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 500, pl. 76, figs. 9b, 9c.
43386. **Dichotrypa lyroides** Ulrich.      Holotype.  
St. Louis (Miss.).    Southern Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 502, pl. 77, figs. 2-2b.
41366. **Dicranella bicornis** Ulrich.      Cotypes.  
Black River (Ord.).    Minneapolis.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 665, pl. 44, fig. 26; pl. 46, figs. 39, 40.
41368. **Dicranella marginata** Ulrich.      Holotype.  
Black River (Ord.).    Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 666, pl. 44, figs. 27, 28.
41367. **Dicranella ? simplex** Ulrich.      Holotype.  
Black River (Ord.).    Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 666, pl. 44, figs. 24, 25; pl. 46, fig. 42.
41369. **Dicranella spinosa** Ulrich.      Holotype.  
Black River (Ord.).    Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 665, pl. 44, fig. 23; pl. 46, fig. 41.
44098. **Dicranopora lata** Ulrich.      Cotypes.  
Richmond (Ord.).    Clarksville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 166, pl. 6, figs. 16, 16a.  
= *Rhinidictya lata*.
43707. **Dicranopora trentonensis** Ulrich.      Holotype.  
Stones River (Ord.).    Lebanon, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 167, pl. 6, figs. 15, 15a.  
= *Rhinidictya trentonensis*.
25348. **Dictyophytra (?) walcotti** Rauff.      Plesiotype.  
Utica (Ord.).    Near Holland Patent, New York.  
Rauff, Palaeontographica, XL, 1894, p. 249, pl. 4, figs. 1, 2.
38146. **Dieconeura arcuata** Scudder.      Holotype.  
Upper Coal Measures.    Mazon Creek, Grundy County, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 336, pl. 3, fig. 4; Foss. Insects N. America, I, 1890, p. 300, pl. 16, fig. 4.



38156. **Dieconeura rigida** Scudder. Holotype.  
Upper Coal Measures. Campbells Ledge, near Pittston.  
Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 336, pl. 29,  
fig. 10; Foss. Insects N. America, I, 1890, p. 300, pl. 16, fig. 4.
35358. **Dielasma bovidens** (Morton)? Plesiotype.  
Upper Carboniferous. Rock Creek, Elk Mountains, Col-  
orado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 409, pl. 7,  
figs. 11, 11a.  
See *Terebratula bovidens*.
35179. **Dielasma utah** (Hall and Whitfield). Holotype and  
15239. plesiotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yel-  
lowstone National Park.  
Waverly (Miss.). Cottonwood divide, Wahsatch Range,  
Utah.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 544, pl. 69,  
figs. 6a, 6b, 6c.  
See *Terebratula utah*.
- Dikellocephalus*. See *Dicellocephalus*.
107135. **Dillwynella errata** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 323, pl. 27, fig. 2.
5947. **Dillwynella naticoides** (Lea). Plesiotypes.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 418, pl. 18, fig. 3.
41641. **Dilobella typa** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 673, pl. 46, figs. 30-34.
4797. **Diloma (Chlorodiloma) ruderata** Dall. Holotype.  
Miocene. Penjinsk Gulf, Siberia.  
Dall, Proc. U. S. Nat. Mus., XVI, 1893, p. 476, pl. 56, fig. 3.
113799. **Dimya grandis** Dall. Cotypes.  
Oligocene. Potrero, Rio Amina, Santo Domingo.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 328; Trans Wagner  
Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 764, pl. 35, fig. 8.
45548. **Dinobolus? parvus** Whitfield. Plastotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. I, 1893, p. 356, figs. A and C.



35454. **Dinorthis subquadrata** (Hall). Plesiotypes.  
Richmond (Ord.). Wilmington, Illinois.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 7, 8.  
Dipeltis. See Mylacris (Dipeltis).
14577. **Diphyphyllum fasciculum** Meek. Cotypes.  
14578. Upper Devonian. Argyle and Treasure Hills, White Pine  
District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 29,  
pl. 2, figs. 4-4b.
4884. **Dipleura dekayi** Green. Plastotypes.  
4919. Hamilton (Dev.). Northumberland, and Leighton,  
Pennsylvania.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 79. Cast  
Nos. 30, 31.  
= Homalonotus dekayi.  
See Nuttainia sparsa.
44071. **Diploclema sparsum** (Hall). Plesiotypes and figured  
sections.  
Niagara (Sil.). Lockport, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 369, pl. 53, fig. 10.
43251. **Diploclema trentonense** Ulrich. Cotypes and figured  
sections.  
Trenton (Ord.). Trenton Falls, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 369, pl. 53, figs. 9-9c.
155739. **Diplodonta acclinis** (Conrad). Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1186, pl. 28, figs. 2, 13.
107334. **Diplodonta alta** Dall. Cotypes.  
114717. Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 189, pl. 11, figs. 9a, 9b; Pt. V, 1900, p. 1183, pl. 44, fig. 19.
112365. **Diplodonta caloosaensis** Dall. Holotype.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1188, pl. 44, fig. 16.
135724. **Diplodonta (Felaniella) minor** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1183,  
pl. 44, fig. 17.
155744. **Diplodonta (Phlyctiderma) puncturella** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
1183, pl. 45, fig. 26.



135864. *Diplodonta radiata* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1184, pl. 44, fig. 11.
111596. *Diplodonta shilohensis* Dall. Cotypes.  
111609. Basal Miocene. Shiloh and Jericho, Cumberland County, New Jersey.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1184.
144548. *Diplodonta yorkensis* Dall. Holotype.  
Miocene. York River, near Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1185, pl. 43, fig. 5.
15314. *Diplograptus? simplex* Eminons. Plesiotype.  
Lower Cambrian. Parkers Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 92, pl. 11, figs. 4, 4a.  
= *Phyllograptus? cambrensis*.
8311. *Diplopodia hilli* (Clark). Holotype.  
Austin (Upper Cret.). Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 50, pl. 16, figs. 2a-g.  
See *Pseudodiadema hilli*.
19115. *Diplopodia texanum* (Roemer). Plesiotype.  
Fredericksburg (Lower Cret.). Georgetown, Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 48, pl. 15, figs. 1a-f; pl. 16, figs. 1a-d.  
See *Cyphosoma texanum*.
43390. *Diplotrypa? dubia* Ulrich. Figured sections of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 459, pl. 33, figs. 3-3h.
43534. *Diplotrypa limitaris* Ulrich. Holotype and figured sections.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 286, fig. 18.
43654. *Diplotrypa milleri* Ulrich. Holotype and figured sections.  
Osgood (Sil.). Osgood, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 245, pl. 11, figs. 2-2c.
43533. *Diplotrypa neglecta* Ulrich. Holotype and figured sections.  
Trenton (Ord.). Hader, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 287, fig. 19.



43306. **Diplotrypa patella** Ulrich. Holotype and figured sections.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890. p. 458, pl. 33, figs. 2-2d.  
= *Mesotrypa patella*.
43810. **Diplotrypa westoni** Ulrich. Figured sections and fragment  
of holotype.  
Trenton (Ord.). Big Island, Lake Winnipeg, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal., Cambro-Sil., Pt. II,  
1889, p. 30, pl. 8, figs. 4a, 4b.
14276. **Discina connata** Walcott. Cotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 214, pl. 7, figs.  
3, 3a.  
= *Lingulodiscina* (?) *connata*.
13780. **Discina lodensis** (Hall). Plesiotype.  
White Pine Shale (Lower Carb.). Applegate Canyon,  
White Pine District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 112, pl. 2, figs.  
5, 5a.  
= *Orbiculoidea lodensis*.
111667. **Discina lugubris** (Conrad). Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 23, pl. 1,  
figs. 1-3.  
= *Discinisca lugubris*.
1009. **Discina manhattanensis** Meek and Hayden. Cotypes.  
Upper Carboniferous. Opposite Manhattan, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1859, p. 25.  
= *Orbiculoidea missouriensis*.
13858. **Discina minuta** (Hall). Plesiotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 112, pl. 13, fig. 5.  
= *Orbiculoidea minuta*.
14279. **Discina newberryi** Hall. Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 213, pl. 18, figs.  
3 (2, 2a?).  
= *Orbiculoidea newberryi*.
14277. **Discina nitida** (Phillips). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 213, pl. 7,  
4, 4a.  
= *Orbiculoidea nitida*.



1102. *Discina tenuilineata* Meek and Hayden. Holotype.  
Permian. Cottonwood Creek, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1859, p. 25.  
= *Orbiculoidea tenuilineata*.
13387. *Discina utahensis* Meek. Cotypes.  
Triassic. Weber Canyon, Wasatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl., 40th Par., IV, Pt. I, 1877, p. 99,  
pl. 10, figs. 3, 3a (named at end of description).
109289. *Discinisca lugubris* (Conrad). Plesiotype.  
Miocene. Probably Nansemond River, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1534, pl. 58, fig. 13.  
See *Discina lugubris*.
45214. *Discinopsis gulielmi* Matthew. Plastotype.  
St. John (Cambrian). Portland, New Brunswick.  
Hall and Clarke, Nat. Hist. New York, Pal. VIII, Pt. I, 1892, p.  
105, pl. 3, figs. 21, 22.
83659. *Discohelix retifera* Dall. Cotypes.  
Pliocene. Guadalupe Island, West Indies.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
332, pl. 19, figs. 1, 1b, 1c.
158069. *Discotrochus orbignianus* Milne-Edwards and Haime.  
158070. Plesiotypes.  
Lower Claiborne (Eocene). Bienville Parish, Louisiana;  
Newton, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 79, pl. 5, figs.  
14-19b.
115607. *Ditrupa dentalinum* Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, pl. 16, fig. 11.
114635. *Divaricella chipolana* Dall. Holotype.  
Oligocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1389, pl. 51, fig. 2.
157796. *Divaricella compsa* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1391, pl. 51, fig. 3.
107102. *Divaricella prevaricata* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 327, pl. 30, fig. 4.
145142. *Divaricella quadrisulcata* (Orbigny). Plesiotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1389, pl. 51, fig. 1.



97490. **Dolabella aldrichi** Dall. Cotypes.  
Oligocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 18,  
pl. 10, fig. 7a.
46759. **Dolabra ? alpina** Hall. Plastotype.  
Lower Coal Measures. Alpina, Iowa.  
Hall, Rept. Geol. Surv. Iowa, I, Pt. II, 1858, p. 716, pl. 29, fig. 2.
46360. **Dolabra sterlingensis** Meek and Worthen. Plastotype.  
Richmond (Ord.). Sterling, Illinois.  
Meek and Worthen, Geol. Surv. Ill., III, 1868, p. 339, pl. 4, figs.  
10a-c.  
= *Whitella sterlingensis*.
35140. **Dolatocrinus asterias** Wood. Holotype and paratypes.  
36022. Middle Traverse (Dev.). Collins quarry, near Alpena,  
36023. Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 71, text  
figs. 5, 6, 7, pl. 16, figs. 1, 1a.
26396. **Dolatocrinus costatus** Wood. Holotype.  
Middle Traverse (Dev.). Collins quarry, near Alpena,  
Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 70, pl.  
16, figs. 6, 6a.
36029. **Dolatocrinus excavatus** Wachsmuth and Springer. Plesiotype.  
Middle Devonian. Louisville, Kentucky.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 78.
42428. **Dolatocrinus major** Wachsmuth and Springer. Plesiotype.  
Onondaga (Dev.). Columbus, Ohio.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 76.
43110. **Dolatocrinus ornatus** Meek. Plesiotypes.  
Onondaga (Dev.). Columbus, Ohio.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 76.
36024. **Dolatocrinus triadactylus** Barris. Plesiotypes.  
Upper Traverse (Dev.). Partridge Point, Alpena, Michi-  
gan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 74.
25673. **Dolichocephala lacoana** Claypole. Holotype.  
Catskill (Upper Dev.). Meshoppen, Wyoming County,  
Pennsylvania.  
Claypole, Proc. Amer. Phil. Soc., XXI, 1883, p. 236, plate.  
= *Stylonurus excelsior*.
3536. **Dolium petrosum** Conrad. Cotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 727, Atlas, pl. 19,  
fig. 3a, b, 4a, b, 5a, b.



23870. *Domatoceras umbilicatum* Hyatt. Holotype.  
Upper Carboniferous. Oswego, Kansas.  
Hyatt, Second Ann. Rept. Geol. Surv. Texas, 1891, p. 343, text  
figs. 45, 46.
39940. *Donacicrinites simplex* Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
108450. *Donax æquilibrata* Dall. Holotype.  
Pliocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
968, pl. 28, fig. 17.
114682. *Donax chipolana* Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 966,  
pl. 44, fig. 20.
22888. *Donax cuneata* Stanton. Holotype.  
Colorado (Cret.). Bear River City, Wyoming.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 110, pl. 3,  
fig. 1.
115034. *Donax emmonsii* Dall. Plesiotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 967,  
pl. 28, fig. 16.
115654. *Donax flabagelloides* Guppy. Holotype.  
Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 435, pl. 18, fig. 10.
22889. *Donax ? oblonga* Stanton. Cotype.  
Colorado (Cret.). Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 111, pl. 3,  
fig. 2.
3613. *Donax ? protexta* Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, pp. 723, 724, Atlas  
pl. 17, fig. 9.  
—Solen (Plectosolen) protextus.
115722. *Dosinia (Dosinidia) acetabulum obliqua* Dall. Holotype.  
Chesapeake (Miocene). Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1231, pl. 54, fig. 13.
164869. *Dosinia ? alaskana* Dall. Holotype.  
Miocene. Popof Island, Shumagins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 115, pl. 10.



1835. *Dosinia alta* Conrad. Holotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 320, pl. 2, fig. 2.
114576. *Dosinia (Dosinidia) chipolana* Dall. Holotype.  
Chipola (Oligocene). Chipola River, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1229, pl. 54, fig. 4.
115541. *Dosinia cyclica* Guppy. Holotype.  
Eocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 582, pl.  
26, fig. 15.  
=*Lucinopsis cyclica*.
12282. *Dosinia jurassica* Whitfield. Cotypes.  
Jurassic. Near the Belle Fourche River, and on Spearfish  
Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 373, pl. 5, figs. 21-24.
135891. *Dosinia (Dosinidia) liogona* Dall. Cotypes.  
Uppermost Oligocene. Oak Grove, Santa Rosa County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1230, pl. 53, figs. 4, 7; pl. 54, fig. 11.
13343. *Dosinia longula* Conrad. Holotype.  
Miocene. Salinas River, Monterey County, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 193, pl. 7, fig. 2.
12249. *Dosinia missouriana* (Morton)? Plesiotype.  
Fort Pierre (Cret.). Cheyenne River, ten to fifteen miles  
west of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 416, pl. 11, figs. 25, 26.
13357. *Dosinia montana* Conrad. Holotype.  
Miocene. Salinas Valley, Monterey County, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific  
Ocean, VII, 1857, p. 194, pl. 6, fig. 4.
13356. *Dosinia subobliqua* Conrad. Holotype.  
Miocene. Salinas Valley, Monterey County, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific  
Ocean, VII, 1857, p. 194, pl. 6, fig. 5.
1319. *Dosinia ? tenuis* Meek. Cotypes.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1861, p. 315.  
=*Cyprimeria ? tenuis*.



41375. **Drepanella ampla** Ulrich. H  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p.  
 8, fig. 2.
41379. **Drepanella bigeneris** Ulrich. H  
 Stones River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., I  
 1894, p. 672, pl. 44, figs. 20-22.
41558. **Drepanella bilateralis** Ulrich. C  
 Black River (Ord.). St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., I  
 1894, p. 671, pl. 46, figs. 35-38.
41377. **Drepanella crassinoda** Ulrich. H  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890,  
 8, figs. 1a-c.
41376. **Drepanella elongata** Ulrich. H  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890,  
 8, figs. 5a, b (on plate changed to *D. ampla* var.  
 = *Drepanella ampla elongata*.
41373. **Drepanella macer** Ulrich. H  
 Stones River (Ord.). Lavergne, Tennessee.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890,  
 8, figs. 4a-c.  
 = *Drepanella crassinoda macra*.
41378. **Drepanella nitida** Ulrich. H  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890,  
 8, figs. 3a, b (on plate changed to *D. crassinoda* va  
 = *Drepanella crassinoda nitida*.
41374. **Drepanella richardsoni canadensis** Ulrich.  
 Lorraine (Ord.). Oakville, Ontario, Canada.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p.
97321. **Drillia acucinata** Dall. H  
 Pliocene. Caloosahatchie River, near Fort Th  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, p  
 pl. 2, fig. 11.
97320. **Drillia acurugata** Dall. H  
 Pliocene. Caloosahatchie River, near Fort Th  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, p  
 pl. 2, fig. 12.



97312. **Drillia aepynota acila** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 29.
113168. **Drillia aphanitoma** Dall. Cotypes.  
Pliocene, Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 221,  
pl. 14, fig. 2b.
113169. **Drillia aphanitoma oxia** Dall. Holotype.  
Pliocene?. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 222,  
pl. 14, fig. 1b.
97327. **Drillia bigemma** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 35,  
pl. 2, fig. 6.
97318. **Drillia ebenina** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 33,  
pl. 2, fig. 8.
97326. **Drillia edilia** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 35,  
pl. 3, fig. 9.
111163. **Drillia elegans** (Emmons). Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 115, pl. 21,  
figs. 2-4.
97329. **Drillia hoplophorus** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 221,  
pl. 14, fig. 1a.
162537. **Drillia johnsoni** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 206, pl. 8, fig. 17.
97332. **Drillia (lissotropis var.?) perpolita** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 36,  
pl. 2, fig. 2.
97333. **Drillia (lissotropis var.) scissurata** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 36.



162536. *Drillia merriami* Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 207, pl. 8, fig. 7.
113144. *Drillia myrmecoön* Dall. Holotype.  
Pliocene (?). Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 220, pl. 14, fig. 2.
112087. *Drillia newmani* Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 29, pl. 4, figs. 5, 5a.
97325. *Drillia piscator* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 34, pl. 2, fig. 10.
97324. *Drillia podagrina* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 34, pl. 2, fig. 9.
113172. *Drillia schismatica* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 222, pl. 14, fig. 1.
97323. *Drillia sedilia* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 33, pl. 2, fig. 1.
113170. *Drillia sigela* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 223, pl. 14, fig. 2a.
111628. *Drillia subflexuosa* Whitfield. Holotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 116, pl. 21, figs. 5-7.
38213. *Drymadusa speciosa* (Heer). Plesiotypes.  
Upper Miocene. Oeningen, Baden, Germany.  
Scudder, Geol. Mag., London, Dec. IV, II, 1895, p. 117, pl. 6, fig. 1.



43388. **Drymotrypa dichotoma** Ulrich. Holotype.  
Trenton (Ord.). Montreal, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 399, pl. 53, fig. 6.
43389. **Drymotrypa diffusa** (Hall). Plesiotype and figured sections.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 53, figs. 7-7b.
27738. **Duncanella rudis** Girty. Plesiotypes.  
Helderbergian (Dev.). Big Sandy River, Benton County,  
Tennessee.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 553.
45796. **Dyeria costata** (James). Plesiotypes.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1044, fig. 8.
13898. **Dystactella insularis** Walcott. Holotype.  
Middle Devonian. Grays Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 172, pl. 15, fig. 8.  
= *Nuculites insularis*.
46553. **Dystactospongia minima** Ulrich. Holotype.  
Richmond (Ord.). Near Hanover, Butler County, Ohio.  
Ulrich, Amer. Geol., III, 1889, p. 243.
46554. **Dystactospongia minor** Ulrich and Everett. Figured sec-  
tions of holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 278, pl. 8,  
figs. 3a, 3b.
35404. **Dystactospongia minor** Ulrich and Everett. Plesiotypes.  
Stones River (Ord.). Two miles southwest of Columbia,  
Tennessee.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 48, 49.
46555. **Dystactospongia rudis** Ulrich and Everett. Figured sections  
of holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 279, pl. 8,  
fig. 4a.
- Eccyliomphalus devonicus* Walcott. See *Eccyliomphalus*  
*devonicus*.
45797. **Eccyliomphalus contiguus** Ulrich. Cotypes.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1037, pl. 74, figs. 48-52.



13934. **Eccyliomphalus devonicus** Walcott. Cotype.  
Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 187, pl. 6, figs. 6, 6a.
45798. **Eccyliomphalus subrotundus** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1037, pl. 75, figs. 17, 18.
46054. **Eccyliomphalus undulatus** Hall. Plesiotype.  
Stones River (Ord.) Lebanon, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1036, pl. 75, figs. 19-20.
45799. **Eccyliopterus beloitensis** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1032, pl. 62, fig. 70; pl. 74, figs. 1-4.
45800. **Eccyliopterus owenanus** (Meek and Worthen). Plesiotypes.  
45801. Trenton (Ord.). Wykoff, and Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1032, pl. 74, figs. 10-14.
45802. **Eccyliopterus triangulus** (Whitfield). Plesiotypes.  
Beekmantown (Ord.). Providence Island, Vermont.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1031, pl. 62, fig. 73; pl. 74, figs. 5, 6.
45803. **Eccyliopterus volutatus** (Whitfield). Plesiotypes.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1031, pl. 62, figs. 71, 72; pl. 74, figs. 7-9.
115417. **Echinanthus antillarum** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 26, pl. 4, figs. 9-12.
20266. **Echinobrissus texanus** Clark. Holotype.  
Austin (Upper Cret.). Austin, Texas.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, p. 70; Bull. No. 9, U. S. Geol. Surv., 1893, p. 62, pl. 26, figs. 2a-2f.
14997. **Echinocaris whitfieldi** Clarke. Cotypes.  
Naples (Dev.). Hatch Hill, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 45, pl. 2, figs. 3, 4.
135740. **Echinochama antiquata** Dall. Holotype.  
Bowden (Oligocene). Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1404, pl. 54, fig. 9.



35091. **Echinoencrinites fenestratus** Troost. Chirotype.  
 Silurian. Decatur County, Tennessee.  
 Troost, Proc. Amer. Assoc. Adv. Sci. II, 1850, p. 60.  
 = *Tetracystis fenestratus*.
26785. **Echinognathus clevelandi** Walcott. Cotypes.  
 Utica (Ord.). Near Holland Patent, Oneida County, New York.  
 Walcott, Amer. Journ. Sci. (3), XXIII, 1882, p. 213, fig. 1; p. 214, fig. 2.
115372. **Echinolampas anguillæ** Cotteau. Holotype.  
 Miocene. Anguilla, West Indies.  
 Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 24, pl. 4, figs. 5-8.
115401. **Echinolampas antillarum** Cotteau. Holotype.  
 Eocene. St. Bartholomew, West Indies.  
 Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 19, pl. 3, figs. 9-12.
115374. **Echinolampas clevei** Cotteau. Holotype.  
 115419. Eocene. St. Bartholomew, West Indies.  
 Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 23, pl. 4, figs. 1-5.
115387. **Echinolampas lycopersicus** Guppy. Holotype.  
 115388. Miocene. Anguilla, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 300, pl. 19, fig. 8.
115389. **Echinolampas ovum-serpentis** Guppy. Cotypes.  
 115392. Eocene. San Fernando, Trinidad, British West Indies.  
 115409. Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 300, pl. 19, figs. 4-6.
115383. **Echinolampas semiorbis** Guppy. Holotype.  
 115386. Miocene. Anguilla, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 299, pl. 19, fig. 7.
115398. **Echinometra prisca** Cotteau. Cotypes.  
 Miocene. Anguilla, West Indies.  
 Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 12.
115402. **Echinoneus cyclostomus** Leske. Plesiotypes.  
 Miocene. Anguilla, West Indies.  
 Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 14, pl. 1, figs. 28-30.
6778. **Edmondia aspinwallensis** Meek. Holotype.  
 Upper Carboniferous. Aspinwall, Nebraska.  
 Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 216, pl. 4, figs. 2a-2c.



4184. **Edmondia ? calhouni** Meek and Hayden. Cotypes.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 80.  
= *Pleurophorus ? calhouni*.
14387. **Edmondia ? circularis** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 246, pl. 22, fig. 9.
35302. **Edmondia gibbosa** Geinitz. Plesiotype.  
35303. Rico (Upper Carb.). Scotch Creek, Rico Quadrangle,  
Colorado, and Graham, Young County, Texas.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 447, pl. 9,  
figs. 7, 8, 9.
6517. **Edmondia ? glabra** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p.  
214, pl. 10, figs. 7a, 7b.
14386. **Edmondia medon** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 245, pl. 23, fig. 6.
20132. **Edmondia myrina** Hall and Whitfield. Cotypes.  
Triassic. Dun Glen, Pah-Ute Range, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt.  
II, 1877, p. 283, pl. 6, fig. 19.
6495. **Edmondia nebrascensis** (Geinitz). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p.  
214, pl. 10, fig. 8b.
6492. **Edmondia ? nebrascensis geinitzii** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p.  
214, pl. 10, fig. 8a.
13006. **Edmondia ? pinonensis** Meek. Cotypes.  
Middle Devonian. Three miles south of Pinon Pass, Pinon  
Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 46,  
pl. 1, figs. 8, 8a.
6527. **Edmondia reflexa** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr., 1872, p. 213, pl. 10,  
figs. 6a, b, (2 pl. 4, fig. 7).
35255. **Edmondia ? reflexa** Meek. Plesiotypes.  
Upper Coal Measures. Atoka Quadrangle, Indian Terri-  
tory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 585, pl.  
72, figs. 32-36.



6760. **Edmondia subtruncata** Meek. Holotype.  
Upper Carboniferous. Rock Bluff, on the Missouri, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 215, pl. 2, fig. 7.
46556. **Edriospongia basalis** Ulrich and Everett. Figured sections of holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 272, pl. 6, fig. 1c.
108445. **Egerella triangulata** (Lea). Plesiotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 964.
37996. **Eileticus æqualis** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 421, pl. 38, figs. 6-9; Foss. Insects N. America, I, 1890, p. 397, pl. 30, figs. 6-9.
38004. **Eileticus anthracinus** Scudder. Plesiotype.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 420, pl. 38, fig. 5; Foss. Insects N. America, I, 1890, p. 396, pl. 30, fig. 5.
114455. **Emarginula (Rimula) caroliniana** Dall. Holotype.  
Pliocene. Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 429, pl. 20, fig. 10.
112706. **Emarginula pilsbryi** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 429, pl. 21, figs. 8, 8a.
12237. **Enallaster obliquatus** Clark. Holotype.  
Fredericksburg (Lower Cret.). Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 79, pl. 40, figs. 1a-1.
8349. **Enclimatoceras (Nautilus) ulrichi** White. Holotype and  
12346. paratypes.  
18711. Eocene. Near Little Rock, Arkansas.  
White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 17, pls. 7-9.—Harris, Ann. Rept. Geol. Surv. Ark., Pt. II, 1894, p. 38, pl. 2.
41953. **Encrinurus cristatus** Clarke. Holotype.  
Richmond (Ord.). Spring Valley, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, I, 1894, p. 741, fig. 58.



41954. **Encrinurus vannulus** Clarke. Cotype.  
Stones River (Ord.). Dixon, Illinois.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 740, fig. 47.
17401. **Endoceras proteiforme** Hall? Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 86, pl. 12, figs. 1, 1a, 1c.
12323. **Endocostea sulcata** (Roemer). Plesiotype.  
Fort Pierre (Cret.). East Fork of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 404, pl. 10, fig. 6.
12261. **Endocostea typica** Whitfield. Cotypes.  
Fort Pierre (Cret.). Old Woman Fork, Cheyenne River, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 403, pl. 9, figs. 1-6.
46194. **Endodesma compressum** Ulrich. Holotype.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 529, pl. 36, figs. 35-37.
46195. **Endodesma cuneatum** Ulrich. Holotype.  
Trenton (Ord.). Near Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 526, pl. 36, figs. 33, 34.
46196. **Endodesma gesneri** (Billings). Plesiotype.  
Trenton (Ord.). Ottawa, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 528, pl. 37, figs. 3, 4.
46197. **Endodesma orthonotum** (Meek and Worthen). Plastotype.  
Stones River (Ord.). Dunleith, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 527, pl. 37, figs. 1, 2.  
See *Modiolopsis orthonota*.
23871. **Endolobus gibbosus** Hyatt. Cotypes.  
Upper Carboniferous. Colorado River, near Bend, San Saba County, Texas.  
Hyatt, Second Ann. Rept. Geol. Surv. Texas, 1891, p. 353, text figs. 55, 56.  
= *Stearoceras gibbosum*.
158460. **Endopachys lonsdalei** Vaughan. Holotype.  
Claibornian (Eocene). Newton, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 189, pl. 22, figs. 10, 10a.



158414. **Endopachys maclurii** (Lea). Plesiotypes.  
 Claibornian (Eocene). Claiborne, Alabama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 186, pl. 21,  
 figs. 15, 16.
158456. **Endopachys maclurii triangulare** Conrad? Plesiotype.  
 Jacksonian (Eocene). Jackson, Mississippi.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 188, pl. 22,  
 fig. 9.
35201. **Endothyra baileyi** (Hall). Plesiotypes.  
 Warsaw (Miss.). Spergen Hill, Indiana.  
 Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 507, pl. 71,  
 figs. 12a, 12b.
35202. **Endothyra baileyi parva** Girty. Cotypes.  
 Madison (Miss.). White Mountain, Absaroka Range,  
 Yellowstone National Park.  
 Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 507, pl. 71,  
 figs. 13a-13c.
8286. **Endothyra ornata** Brady. Plesiotype.  
 Carboniferous. Téton Mountains, south of Yellowstone  
 National Park.  
 White, Proc. U. S. Nat. Mus., II, 1880, p. 291.
29399. **Engonoceras complicatum** Hyatt. Holotype and paratype.  
 29400. Fredericksburg (Cret.). Near Austin, Texas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 175, pl. 24, figs. 6-8.
- 8301a. **Engonoceras gibbosum** Hyatt. Cotypes.  
 29388 Fredericksburg (Cret.). Bell County, and near Denison,  
 to and Gainesville, Texas.  
 29390. Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 171-175, pl. 22,  
 figs. 6-10; pl. 23, figs. 4-6.
- 8301b. **Engonoceras pierdentale commune** Hyatt. Cotypes.  
 22643. Fredericksburg (Cret.). Bell County, and near Glenrose,  
 29392. Texas; near Cerrogordo, Arkansas; Goodland, Indian  
 29394. Territory.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 165, pl. 20, figs.  
 9-13; pl. 21, fig. 1.
29398. **Engonoceras retardum** Hyatt. Holotype.  
 Grayson (Lower Cret.). Near Pottsboro, Texas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 160, pl. 19, figs.  
 15-17.
29401. **Engonoceras serpentinum** (Cragin). Plesiotypes.  
 Washita (Lower Cret.). Four and a half miles northeast  
 of Gainesville, Texas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 162, pl. 19, figs.  
 7-9, 11-14.



29397. **Engonoceras subjectum** Hyatt. Cotyp  
 Washita Cret. . . Near Denison, Texas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 168, pl. 22, figs. 1, 2.
23147. **Engonoceras uddeni** (Cragin). Plesiotyp  
 Kiowa Cret. . . McPherson County, Kansas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 159-161, pl. 1, figs. 4, 5.
146738. **Ensis minor** Dall. Plesiotyp  
 Pleistocene. Simmons Bluff, South Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901, p. 965.
311. **Entalis? paupercula** (Meek and Hayden). Holotyp  
 Fox Hills (Cret. . . Moreau River, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 269, pl. 1, fig. 14.  
 See Dentalium pauperculum.
6485. **Entolium aviculatum** (Swallow). Plesiotyp  
 Upper Carboniferous. Nebraska City, Nebraska.  
 Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 18, pl. 9, figs. 11a-f.
41565. **Entomis madisonensis** Ulrich. Holotyp  
 Richmond Ord. . . Five miles north of Madison, Indiana.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 107, pl. 1, figs. 12a, 12b.
41566. **Entomis waldronensis** Ulrich. Holotyp  
 Waldron Sil. . . Near Waldron, Indiana.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1897, p. 18, pl. 12, figs. 3a, 3b.
15315. **Eocystites?? longidactylus** Walcott. Cotyp  
 Middle Cambrian. Chisholm Mine, Ely Mountains, near Pioche, Nevada.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 94, pl. 5, fig. 1, pl. 6, figs. 1-1c.
14926. **Eophyton linnæanum** Linnarsson. Plesiotyp  
 Lower Cambrian. Lugnas, Sweden.  
 Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 587, pl. 1, fig. 2; Mon. XXX, U. S. Geol. Surv., 1898, p. 64, pl. 1, figs. 1, 2.
46055. **Eotomaria canalifera** Ulrich. Cotyp  
 Stones River (Ord. . . Murfreesboro, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. 1, 1897, p. 1002, pl. 69, figs. 9-14.



45804. **Eotomaria dryope** (Billings). Plesiotypes.  
 45805. Stones River (Ord.). Cannon Falls, Minnesota.  
 Black River (Ord.). Maury County, Tennessee.  
 Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1003, pl. 69, figs. 21-25.
45806. **Eotomaria elevata** Ulrich. Holotype.  
 Trenton (Ord.). Hartsville, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1005, pl. 70, figs. 68, 69.
46056. **Eotomaria labiosa** Ulrich. Holotype.  
 Stones River (Ord.). Murfreesboro, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1003, pl. 69, figs. 15-17.
45807. **Eotomaria supracingulata** (Billings). Plesiotypes.  
 45808. Stones River (Ord.). Beloit, Wisconsin; Dixon, Illinois.  
 Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1004, pl. 69, figs. 26-29.
45809. **Eotomaria vicina** Ulrich and Scofield. Cotype.  
 Stones River (Ord.). Mineral Point, Wisconsin.  
 Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1003, pl. 69, figs. 19, 20.
46535. **Eotrophonia setigera** Ulrich. Cotypes.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1879, p. 91, pl. 4, figs. 5, 5a.
23866. **Ehippioceras divisium** (White and St. John). Plesiotypes.  
 Upper Carboniferous. Near Oswego, Kansas.  
 Hyatt, Second Ann. Rept. Geol. Surv. Texas, 1891, p. 350, text figs. 52-54.
21887. **Epiaster elegans** (Shumard). Plesiotype.  
 Washita (Lower Cret.). Texas.  
 Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 80, pl. 41, figs. 1a-b; pl. 42, figs. 1a-b; pl. 43, figs. 1a-e.
9732. **Epiaster whitei** Clark. Cotypes.  
 Washita (Lower Cret.). Duck Creek, near Denison, Texas.  
 Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 82, pl. 43, figs. 2a-d; pl. 44, figs. 1a-g.  
 See *Toxaster elegans*.
111638. **Erato emmonsii** Whitfield. Cotypes.  
 Miocene. Jericho, New Jersey.  
 Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 108, pl. 19, figs. 9-11.



46198. **Eridonychia apicalis** Ulrich. Holotype.  
Lorraine (Ord.). Newport, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 639, pl. 47, fig. 1.
46199. **Eridonychia crenata** Ulrich. Holotype.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 640, pl. 47, fig. 3.
46200. **Eridonychia paucicostata** Ulrich. Holotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 640, pl. 47, fig. 2.
43238. **Eridopora macrostoma** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 137, pl. 6, figs. 2, 2a.
43239. **Eridopora punctifera** Ulrich. Holotype and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 138, pl. 6, fig. 3.
43535. **Eridotrypa exigua** Ulrich. Cotypes.  
Trenton (Ord.). Two miles south of Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn. Final Rept., III, Pt. 1893, p. 266, pl. 26, figs. 17-18.
43536. **Eridotrypa mutabilis** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. 1893, p. 265, pl. 26, figs. 22-32.
43537. **Eridotrypa mutabilis minor** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. 1893, p. 266, pl. 26, figs. 20, 21, 29, 30.
332. **Eriphyla gregaria** (Meek and Hayden). Holotype and paratype.  
Montana (Cret.). Yellowstone River, near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 124, text fig. 6, 7, pl. 17, figs. 9a, 9b.  
See *Astarte gregaria*.
- ~~5059a~~ **Erisocrinus** (**Ceriocrinus**) **hemisphericus** (Shumard). Plesiotype.  
Upper Carboniferous. Thirty miles west of Humboldt, Kansas.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1880), Pt. I, p. 127, pl. 35, fig. 5c.  
= **Delocrinus hemisphericus**.



8036. **Erisocrinus (Ceriocrinus) inflexus** Geinitz. Plesiotype.  
Upper Carboniferous. Confluence of Grand and Green  
rivers, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 128, pl. 34, figs. 9a, 9b.  
= *Delocrinus inflexus*.
8034. **Erisocrinus (Ceriocrinus) planus** White. Holotype.  
Upper Carboniferous. Thirty miles west of Humboldt,  
Kansas.  
White, Proc. U. S. Nat. Mus., II, 1880, p. 257, pl. 1, figs. 6, 7 (as  
*E. planus*); Twelfth Ann. Rept. U. S. Geol. Surv. Terr.,  
1878 (1883), p. 127, pl. 35, figs. 5a, 5b.  
= *Delocrinus planus*.
1080. **Erisocrinus typus** Meek and Worthen. Plesiotype.  
Upper Carboniferous. Bellevue, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 146,  
pl. 1, figs. 3a, 3b.
8037. **Erisocrinus typus** Meek and Worthen. Plesiotype.  
Upper Carboniferous. Confluence of Grand and Green  
rivers, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 126, pl. 33, fig. 5a.
114603. **Ervilia chipolana** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 914, pl. 33, fig. 10.
115054. **Ervilia lata** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 915, pl. 33, fig. 20.
107406. **Ervilia oregonensis** Dall. Holotype.  
Eocene? Nehalem River, Columbia County, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 916, pl. 33, fig. 16.
153768. **Ervilia planata** Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 915.
153769. **Ervilia polita** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 916, pl. 33, fig. 17.
114704. **Ervilia triangularis** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV,  
p. 915, pl. 33, fig. 19.



145814. *Erycina* (*Pseudopythina*?) *americana* Dall. Holotype.  
Miocene. Calvert Cliffs, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1146, pl. 44, figs. 21, 25.
155750. *Erycina carolinensis* Dall. Cotypes.  
Miocene. Natural Well, Duplin County, North Carolina,  
and Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1145, pl. 44, figs. 3, 22.
114676. *Erycina chipolana* Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1144, pl. 44, fig. 15; pl. 45, fig. 17.
135877. *Erycina curticens* Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1145, pl. 45, fig. 14, 15.
135878. *Erycina fabulina* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1145, pl. 45, fig. 1.
155755. *Erycina kurtzii* Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1147, pl. 25, fig. 12.
155752. *Erycina marylandica* Glenn. Plesiotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1146, pl. 45, fig. 19.
137389. *Erycina plicatula* Dall. Cotypes.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1143, pl. 44, figs. 7, 12.
155753. *Erycina* (*Pseudopythina*) *protracta* Dall. Holotype.  
Pliocene. Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1146, pl. 45, fig. 22.
115652. *Erycina tensa* Guppy. Holotype.  
Miocene. Manzanilla, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 582, pl.  
26, fig. 6.  
= *Corbula disparilis*.
114677. *Erycina undosa* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1144, pl. 45, fig. 3.



135637. **Erycinella (Carditopsis) bernardi** Dall. Holotype.  
Pliocene. Limon, Costa Rica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1438, pl. 53, fig. 10.
144624. **Erycinella ovalis** Conrad. Plesiotype.  
Miocene. Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1438, pl. 53, fig. 2.
43538. **Escharopora angularis** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 168, pl. 12, figs. 1-4, 30, 31.
43539. **Escharopora confluens** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 171, pl. 13, figs. 1-11.
43807. **Escharopora (?) limitaris** Ulrich. Cotypes and figured  
sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 172, text fig. 9, pl. 13, fig. 13.
43818. **Escharopora subrecta** (Ulrich). Cotypes and figured  
sections.  
43819. Black River (Ord.). Minneapolis and Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 168, pl. 12, figs. 5-29.  
See *Ptilodictya subrecta*.
15307. **Ethmophyllum gracile** Meek. Holotype.  
Lower Cambrian. Silver Peak, Nevada.  
Meek, Amer. Journ. Sci. (2), XLV, 1868, p. 64.  
= *Ethmophyllum whitneyi*.
18358. **Ethmophyllum meeki** Walcott. Cotype.  
Lower Cambrian. Silver Peak, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 34; Tenth Ann.  
Rept. U. S. Geol. Surv., 1890, p. 601, pl. 55, figs. 2-2c.
15304. **Ethmophyllum profundum** (Billings). Plesiotypes.  
Lower Cambrian. L'Anse au Loup, Labrador.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 84, pl. 1,  
figs. 1a-1c; pl. 2, figs. 3-3b; pl. 4, fig. 3.  
= *Archæocyathus profundum*.
15306. **Ethmophyllum rarum** (Ford). Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 87, pl. 5, figs.  
2, 2a.  
= *Archæocyathellus rarus*.



15305. **Ethmophyllum rensselaericum** (Ford). Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 85, pl. 5, figs. 1-1e.  
= *Archæocyathellus rensselaericum*.
15307. **Ethmophyllum whitneyi** Meek. Cotype.  
Lower Cambrian. Silver Peak, Nevada.  
Meek, Amer. Journ. Sci. (2), XLV, 1868, p. 62. Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 81, pl. 4, figs. 1-1c, 1f, 1g; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 601, pl. 55, figs. 1-1e.  
See *Ethmophyllum gracile*.
38169. **Etoblattina accubita** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 88, pl. 7, fig. 2.
38185. **Etoblattina angusta** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 100, pl. 8, fig. 8.
38195. **Etoblattina aperta** Scudder. Holotype.  
Lower Cambrian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 80, pl. 5, fig. 9.
38082. **Etoblattina arcta** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 97, pl. 8, fig. 5.
38188. **Etoblattina communis** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 93, pl. 7, figs. 10-17.
38090. **Etoblattina deanensis** Scudder. Cotypes.  
Coal Measures. Forest of Dean, Gloucester, England.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 34, pl. 12, figs. 1, 3.
38197. **Etoblattina debilis** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 71, pl. 4, fig. 8.
38194. **Etoblattina defossa** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 108, pl. 9, fig. 12.
38084. **Etoblattina detecta** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 75, pl. 4, figs. 12, 13.



38169. ***Etoblattina eakiniana*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 88, pl. 7, fig. 1.
38080. ***Etoblattina exigua*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 76, pl. 5, fig. 4.
38075. ***Etoblattina exilis*** Scudder. Holotype.  
Coal Measures. East Providence, Rhode Island.  
Scudder, Bull. No. 101, U. S. Geol. Surv., 1893, p. 17, pl. 2, fig. e; *ibid.*, No. 124, 1895, p. 101, pl. 9, fig. 1.
38193. ***Etoblattina expugnata*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 102, pl. 9, fig. 4.
38178. ***Etoblattina expulsata*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 89, pl. 7, figs. 3, 4.
38192. ***Etoblattina expuncta*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 79, pl. 5, fig. 6.
38180. ***Etoblattina exsecuta*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 96, pl. 8, fig. 4.
38078. ***Etoblattina funeraria*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 78, pl. 5, fig. 5.
38166. ***Etoblattina gratiosa*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 90, pl. 7, fig. 5.
38069. ***Etoblattina hilliana*** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 99, pl. 8, fig. 11.
38074. ***Etoblattina illustris*** Scudder. Holotype.  
Coal Measures. Pawtucket, Rhode Island.  
Scudder, Bull. No. 101, U. S. Geol. Surv., 1893, p. 12, pl. 2, fig. i; *ibid.*, No. 124, 1895, p. 70, pl. 4, fig. 11.
38079. ***Etoblattina immolata*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 92, pl. 7, figs. 7, 8.



38083. *Etoblattina imperfecta* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 104, pl. 9, fig. 8.
38164. *Etoblattina invisa* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 106, pl. 9, fig. 9.
38200. *Etoblattina lata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 67, pl. 4, fig. 2.
38073. *Etoblattina latebricola* Scudder. Holotype.  
Coal Measures. East Providence, Rhode Island.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 108, pl. 9, fig. 11.
38077. *Etoblattina lesquereuxii* Scudder. Holotype.  
Upper Coal Measures. Yatesville, near Pittston, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 67, pl. 6, figs. 3, 4; Foss. Insects N. America, I, 1890, p. 87, pl. 6, figs. 3, 4.
38183. *Etoblattina macerata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 91, pl. 7, fig. 6.
38163. *Etoblattina macilenta* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 101, pl. 8, fig. 9.
38081. *Etoblattina mactata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 92, pl. 7, fig. 9.
38068. *Etoblattina mazona* Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 181, pl. 10; Foss. Insects N. America, I, 1890, p. 233, pl. 7a; Bull. No. 124, U. S. Geol. Surv., 1895, p. 89, pl. 6, fig. 5.—Sellards, Amer. Journ. Sci. (4), XVIII, 1904, p. 129, text fig. 14, on p. 128.
38198. *Etoblattina mediana* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 69, pl. 4, fig. 4.
38199. *Etoblattina mucronata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 74, pl. 5, fig. 3.
38087. *Etoblattina obatra* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 103, pl. 9, fig. 5.



38071. ***Etoblattina occidentalis*** Scudder. Cotypes.  
Upper Coal Measures. Lawrence, Kansas.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 410, pl. 32,  
fig. 4; Foss. Insects N. America, I, 1890, p. 386, pl. 24, fig. 4.
38085. ***Etoblattina occulta*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 107, pl. 9, fig. 13.
38201. ***Etoblattina ovata*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 70, pl. 4, fig. 6.
38184. ***Etoblattina patiens*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 73, pl. 4, fig. 9.
38165. ***Etoblattina prædulcis*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 98, pl. 8, fig. 12.
38202. ***Etoblattina recidiva*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 109, pl. 9, fig. 14.
38179. ***Etoblattina residua*** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 78, pl. 5, fig. 1.
38088. ***Etoblattina rogi*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 102, pl. 9, figs. 2, 3.
38191. ***Etoblattina sagittaria*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 68, pl. 4, fig. 3.
38076. ***Etoblattina scholfieldi*** Scudder. Holotype.  
Coal Measures. Providence, Rhode Island.  
Scudder, Bull. No. 101, U. S. Geol. Surv., 1893, p. 15, pl. 2, fig. b;  
ibid., No. 124, 1895, p. 71, pl. 4, fig. 7.
38167. ***Etoblattina secreta*** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 105, pl. 9, figs. 6, 7.
38142. ***Eucænus ovalis*** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 325, pl. 29,  
fig. 4; Foss. Insects N. America, I, 1890, p. 289, pl. 15, fig. 4.



30057. **Eucalyptocrinites conicus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
30061. **Eucalyptocrinites extensus** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30050. **Eucalyptocrinites gibbosus** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
30052. **Eucalyptocrinites goldfussi** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30064. **Eucalyptocrinites laevis** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30055. **Eucalyptocrinites nashvillæ** Troost. Chirotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30056. **Eucalyptocrinites ovalis** Troost. Chirotypes.  
Silurian. Perry and Decatur counties, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30060. **Eucalyptocrinites phillipsii** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30062. **Eucalyptocrinites splendidus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30054. **Eucalyptocrinites tennesseæ** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
30058. **Eucalyptocrinites creco-carinata** Hebert. Holotype.  
Silurian. Jackson, Mississippi.  
Hebert, Proc. U. S. Nat. Mus., III, 1880, p. 150, pl. fig. 1.
- ~~Eucalyptocrinites~~ ~~argentea~~ ~~Cory.~~ See ~~Eucalyptocrinites~~ ~~argentea~~
30053. **Eucalyptocrinites planobasalis** Ulrich. Cotypes.  
Silurian. Independence, Kansas City, Missouri.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., First Rep. III, Pl. II, fig. 1, p. 105, 1860.



7753. **Euconospira taggarti** (Meek). Holotype.  
Upper Carboniferous. Horseshoe Mountain, South Park,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 453, pl. 10,  
figs. 9, 9a.  
See *Pleurotomaria taggerti*.
46541. **Euconospira turbiniformis** (Meek and Worthen). Plesiotype.  
Coal Measures. La Salle, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1080, figs. 11d, 11e.
111834. **Eucymba ocalana** Dall. Holotype.  
Eocene. Four and one-half miles west of Enterprise,  
Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, pp. 84,  
89, pl. 7, fig. 1.
20133. **Eudiscoceras gabbi** Meek. Holotype.  
Triassic. Cottonwood Canyon, West Humboldt Range,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 128,  
pl. 11, figs. 4, 4a.
7869. **Eulima? chrysallis** Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p.  
506.  
= *Eulimella? chrysallis*.
112191. **Eulima conoidea** Kurtz and Stimpson. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 159,  
pl. 5, fig. 11.
107082. **Eulima egregia** Guppy. Holotype.  
Tertiary. Monserrat, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 314, pl. 28, fig. 11.
7881. **Eulima funicula** Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p.  
506.  
= *Eulimella? funicula*.
7871. **Eulima? inconspicua** Meek. Holotype.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1872 (1873), p.  
507.  
= *Eulimella? inconspicua*.



107071. **Eulima (Liostraca) nobilis** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 315, pl. 30, fig. 9.
7869. **Eulimella ? chrysallis** (Meek). Holotype.  
Montana (Cret.). Carletons mine, near Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 32, pl. 12, fig. 4a.  
See *Eulima ? chrysallis*.
7881. **Eulimella ? funicula** (Meek). Holotype.  
Colorado (Cret.). Coalville, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 316, pl. 9, fig. 10a.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 140, pl. 30, fig. 9.  
See *Eulima funicula*.
7871. **Eulimella ? inconspicua** (Meek). Holotype.  
Montana (Cret.). Carletons mine, near Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883),  
Pt. I, p. 33, pl. 12, fig. 5a.  
See *Eulima ? inconspicua*.
35172. **Eumetria verneuilliana** (Hall). Plesiotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yellow-  
stone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 560, pl. 68,  
figs. 12a, 12b,
205. **Eumicrotis curta** (Hall). Plesiotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 81, pl. 3, figs. 10a-d.  
See *Avicula (Monotis) tenuicostata*.
20130. **Eumicrotis curta** (Hall). Plesiotypes.  
Jurassic. Ashley Creek, Uinta Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 289, pl. 7, fig. 24.
3958. **Eumicrotis hawni** (Meek and Hayden). Cotypes.  
Permian. Smoky Hill River, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 54, pl. 2, figs. 5a-5c.  
= *Pseudomonotis hawni*.  
See *Monotis hawni*.
1157. **Eumicrotis hawni ovata** Meek and Hayden. Cotypes.  
Permian. Near Cottonwood Creek, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 55, pl. 2, figs. 6a, 6b.  
= *Pseudomonotis hawni ovata*.



107379. **Eunaticina caractacus** Dall. Holotype.  
Oligocene. Oak Grove, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 42, fig. 6.
45810. **Euomphalopterus alatus obsoletus** Ulrich. Holotype.  
Niagara (Sil.). Near Waldron, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 934, figs. 5g-5i.
13933. **Euomphalus eurekaensis** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 185, pl. 16, figs. 2, 2a.
14218. **Euomphalus laxus** White. Plesiotype.  
Waverly (Miss.). Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 260, pl. 4, figs. 24, 25.  
= **Euomphalus luxus**.
13936. **Euomphalus (Phanerotinus) laxus** (Hall). Plesiotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 186, pl. 6, fig. 3.  
= **Eccyliomphalus laxus**.
8531. **Euomphalus luxus** White. Cotypes.  
Lower Carboniferous. Below Orphir City, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 94, pl. 5, figs. 13a, 13b.  
See **Euomphalus laxus**.
9825. **Euomphalus michleranus** Hall. Holotype.  
Middle Ordovician. Locality not given. Probably from near El Paso, Texas.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, pl. 20, fig. 4 (see p. 103).  
= **Maclurea michleranus**.
14219. **Euomphalus (Straparollus) ophirensis** Hall and Whitfield. Cotypes.  
Waverly (Miss.). Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 261, pl. 4, fig. 26.
8490. **Euomphalus pernodosus** (Meek and Worthen). Plesiotype.  
Upper Carboniferous. Mesa, Carrizo River, Arizona.  
White, U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1877, p. 158, pl. 12, fig. 2b.



9208. **Euomphalus springvalensis** White. Holotype.  
Kinderhook (Miss.). Springvale, Humboldt County, Iowa.

White, Proc. Acad. Nat. Sci. Phila., 1876, p. 32; Twelfth Ann.  
Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 167, pl.  
41, figs. 1a, b.

15075. **Euomphalus subplanus** Hall. Cotypes.  
15076. Upper Carboniferous. Between Big and Little Blue Rivers,  
Kansas, and Stansburys Island, Great Salt Lake,  
Utah.

Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 414, pl. 2, figs. 7a, b.

= *Straparollus subplanus*.

21718. **Euomphalus subquadratus** Meek and Worthen. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor  
County, Texas.

White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 25, pl. 3, fig. 9.

14408. **Euomphalus (Straparollus) subrugosus** Meek and Worthen. Plesiotype.

Lower Carboniferous. Eureka District, Nevada.

Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 255, pl. 18, fig. 19.

= *Straparollus catilloides*.

4220. **Euomphalus (Straparollus) utahensis** Hall and Whitfield. Cotypes.

Waverly (Miss.). Dry Canyon, Oquirrh Mountains,  
Utah.

Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 259, pl. 4, figs. 20-23.

= *Straparollus utahensis*.

8058. **Eupachyocrinus platybasis** White. Holotype.  
Lower Aubrey (Upper Carb.). Confluence of Grand and  
Green rivers, Utah.

White, Rept. Geol. Uinta Mts. Powell, 1876, p. 108; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1878 (1883), Pt. I, p. 12,  
pl. 33, fig. 34.

38015. **Euphoberia anguilla** Scudder. Cotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.

Scudder, Mem. Entom. Soc. Nat. Hist., IV, 1880, pp. 226-23,  
pl. 35, fig. 3; Foss. Insects N. America I, 1880, pp. 226-227,  
pl. 2, fig. 20; pl. 28, fig. 3.

38016. **Euphoberia armigera** Meek and Worthen. Plesiotype.  
38017. Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.

Scudder, Mem. Entom. Soc. Nat. Hist., III, 1882, p. 120, pl. 1,  
figs. 1-3; pl. 2, figs. 4-6; pl. 3, figs. 7-9; pl. 4, figs. 10-12;  
Foss. Insects N. America I, 1880, pp. 226-227, pl. 2, figs. 20-22;  
pl. 28, figs. 3-5.



38031. **Eupoberia carri** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 171, pl. 12,  
figs. 4, 9-12, 14-19; pl. 13, figs. 16, 17; Foss. Insects N.  
America, I, 1890, pp. 223, 402, 405, pl. 9, figs. 4, 9-12, 14-19;  
pl. 10, figs. 16, 17.
38017. **Eupoberia cuspidata** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, pp. 426, 429,  
pl. 34, figs. 3, 7; Foss. Insects N. America, I, 1890, pp. 402,  
405, pl. 26, figs. 3, 7.
38011. **Eupoberia ferox** (Salter). Plesiotype.  
Coal Measures. Sedgley, near Dudley, England.  
Woodward, Geol. Mag., London, Dec. III, IV, 1887, p. 6, pl. 1,  
figs. 1-3, 6, 8, 9.
38018. **Eupoberia flabellata** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 174, pl. 13,  
fig. 15; Foss. Insects N. America, I, 1890, pp. 226, 402, pl. 10,  
fig. 15.
38026. **Eupoberia granosa** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 168, pl. 13,  
fig. 13; *ibid.*, IV, 1890, p. 427, pl. 34, figs. 5, 6; Foss. Insects  
N. America, I, 1890, pp. 221, 404, pl. 10, fig. 13; pl. 26,  
figs. 5, 6.
38030. **Eupoberia horrida** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 158, pl. 13,  
figs. 11, 12, 14; Foss. Insects N. America, I, 1890, p. 210, pl.  
10, figs. 11, 12, 14.
38025. **Eupoberia hystriosa** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 426, pl. 33,  
figs. 1, 3; Foss. Insects N. America, I, 1890, p. 402, pl. 25,  
figs. 1, 3.
38024. **Eupoberia simplex** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 432, pl. 35,  
fig. 2; Foss. Insects N. America, I, 1890, p. 408, pl. 27, fig. 2.



37989. **Euphoberia spinulosa** Scudder. Cotypes.  
 37990. Upper Coal Measures. Mazon Creek and Braidwood,  
 Illinois.  
 Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, pp. 426, 430, pl.  
 34, fig. 1; pl. 35, figs. 4, 5; pl. 36, figs. 7, 8; Foss. Insects N.  
 America, I, 1890, pp. 402, 406, pl. 26, fig. 1; pl. 27, figs. 4, 5;  
 pl. 28, figs. 7, 8.
37992. **Euphoberia tracta** Scudder. Cotypes.  
 Upper Coal Measures. Mazon Creek, Grundy County,  
 Illinois.  
 Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, pp. 426, 433,  
 pl. 36, figs. 1, 4-6; Foss. Insects N. America, I, 1890, pp. 402,  
 409, pl. 28, figs. 1, 4-6.
112166. **Eupleura miocenica** Dall. Holotype.  
 Oligocene. Alum Bluff, Chattahoochee River, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 146, pl. 12, fig. 9.
112167. **Eupleura miocenica intermedia** Dall. Cotypes.  
 Pliocene. Caloosahatchie River, near Fort Thompson,  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 147.
162559. **Eupleura muriciformis curta** Arnold. Holotype.  
 Pleistocene. San Pedro, California.  
 Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 249, pl. 8, fig. 9.
55851. **Eupleura muriciformis limata** Dall. Cotypes.  
 Post-Pliocene. Head of Gulf of California.  
 Dall, Proc. U. S. Nat. Mus., XIV, 1891, p. 175.
158391. **Eupsammia elaborata** (Conrad). Plesiotypes.  
 158397. Greggs Landing (Eocene). Greggs Landing, Alabama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 180, pl. 21,  
 figs. 5, 7.
41639. **Eurychilina æqualis** Ulrich. Cotypes.  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 129, pl.  
 9, figs. 5-8.
41616. **Eurychilina granosa** Ulrich. Cotypes.  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 128, pl.  
 9, figs. 9-12.
41623. **Eurychilina longula** Ulrich. Cotypes.  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 127, pl.  
 9, figs. 3a, 3b, 4.



41624. **Eurychilina obesa** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 129, pl. 9, fig. 13.
44600. **Eurychilina reticulata** Ulrich. Cotypes and plesiotype.  
44601. Black River (Ord.). Minneapolis and Lanesboro, Minnesota.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal., Cambro-Sil., Pt. II, 1889, p. 52, pl. 9, figs. 9, 9a; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 660, pl. 44, fig. 1.
41599. **Eurychilina reticulata incurva** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 660, pl. 44, fig. 2.
41615. **Eurychilina striatomarginata** (Miller). Plesiotype.  
Richmond (Ord.). Eight miles north of Madison, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 130, pl. 9, fig. 14.
41628. **Eurychilina? subæquata** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 663, pl. 45, figs. 7-9.
41613. **Eurychilina subradiata** Ulrich. Cotypes.  
41614. Stones River (Ord.). Lebanon, Tennessee; Dixon, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 126, pl. 9, figs. 1a-c; 2a-c.
41611. **Eurychilina subradiata** Ulrich. Plesiotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 661, pl. 44, figs. 3, 4, 4a.
41386. **Eurychilina (?) symmetrica** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 663, pl. 44, figs. 5-7; pl. 45, figs. 4-6.
41625. **Eurychilina ventrosa** Ulrich. Cotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 662, pl. 45, fig. 1.
3664. **Eurydesma cordata** Morris. Plesiotype.  
Carboniferous. Harpers Hill on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 700, Atlas, pl. 8, figs. 1, 1a.



3601. *Eurydesma elliptica* Dana. Holotype  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 700, Atlas, pl. 7  
figs. 6a-d.
3600. *Eurydesma globosa* Dana. Cotypes  
Carboniferous. District of Illawarra, New South Wales  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 700, Atlas, pl. 7  
figs. 7, 7a.
3602. *Eurydesma sacculus* (M'Coy). Plesiotype  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 700, Atlas, pl. 7  
figs. 8a, 8b.
43754. *Eurydictya calhounensis* Ulrich. Figured sections of  
holotype  
Trenton (Ord.). Port au Grés, Calhoun County, Illinois  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 520, pl. 30, figs. 4b, 4c.
43753. *Eurydictya montifera* Ulrich. Figured sections and fragments  
of holotype  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 521, pl. 30, figs. 3b, 3c, 3d.
43604. *Eurydictya multipora* (Hall)? Plesiotypes and  
figured sections  
Trenton (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
1893, p. 139, pl. 6, figs. 9-11; pl. 7, figs. 24, 29-31.
46202. *Eurymya plana* (Hall). Plesiotypes  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
1894, p. 512, pl. 36, figs. 27, 28.
46203. *Eurymya subplana* Ulrich. Cotype  
Trenton (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
1894, p. 513.
25649. *Eurystomites kelloggi* (Whitfield). Plesiotype  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 442, pl. 5, figs. 4.
25655. *Eurystomites rotundus* Hyatt. Cotype  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 443, pl. 5, figs.  
21-25.



9611. **Eurystomites virginiana** Hyatt. Holotype.  
Beekmantown (Ord.). Near Lexington, Virginia.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 444.
115395. **Euspatangus antillarum** Cotteau. Cotypes.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 43,  
pl. 7, figs. 7-11.
115379. **Euspatangus clevei** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 44,  
pl. 8, figs. 1-4.
115371. **Euspatangus grandiflorus** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 45,  
pl. 8, figs. 5, 6.
43391. **Euspilopora? barrisi** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 526, pl. 43, figs. 5-5d.
43752. **Euspilopora serrata** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 526, pl. 43, figs. 4-4c, 4e-4h.
8068. **Euspira coalvillensis** (White). Cotypes.  
Colorado (Cret.). Coalville, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 310, pl. 4, figs. 2a, 2b.  
= *Euspira utahensis*.
12528. **Eutomoceras laubei** Meek. Cotypes.  
Triassic. New Pass, Desatoya Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 126,  
pl. 10, figs. 8, 8a.
43383. **Evactinopora quinqueradiata** Ulrich. Holotype.  
Burlington (Miss.). Burlington, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 510, pl. 73, fig. 1.
43381. **Evactinopora radiata** Meek and Worthen. Plesiotypes.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 509, pl. 73, figs. 3, 3a.
43382. **Evactinopora sexradiata** Meek and Worthen. Plesiotype.  
Burlington (Miss.). Burlington, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 510, pl. 73, figs. 2-2b.
9609. **Exogyra aquila** Goldfuss. Plesiotypes.  
Cretaceous. Bexar County, Texas.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 304, pl. 53,  
figs. 1, 2.



9866. *Exogyra arietina* Roemer. Plesiotypes.  
Washita (Lower Cret.). Leon Springs, Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 153, pl. 7, figs. 1c-1e.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 303, pl. 56, figs. 3-5.

30227. *Exogyra clarki* Shattuck. Cotypes.  
Buda (Lower Cret.). Shoal Creek, Austin, Texas.

Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 22, pls. 10, 11.

20254. *Exogyra columbella* Meek. Cotype.  
Colorado (Cret.). Covero, New Mexico.

Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and Green Riv., Macomb, 1876, p. 124, pl. 1, fig. 3a.

See *Exogyra costata fluminis*.

20254. *Exogyra columbella* Meek. Cotype and plesiotypes.  
8654. Colorado (Cret.). Covero, and near Casa Salazan, New Mexico.

Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 63, pl. 8, figs. 2-4.

See *Exogyra costata fluminis*.

1744. *Exogyra costata* Say. Plesiotypes.  
2213. Cretaceous. New Jersey.

White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 304, pl. 56, fig. 1; pl. 57, figs. 1, 2.

9879. *Exogyra costata* Say. Plesiotypes.  
Cretaceous. Jacun, three miles below Laredo, Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 154, pl. 9, figs. 2a, 2b; pl. 10, fig. 1.  
[Locality erroneous. T. W. Stanton.]

8654. *Exogyra costata fluminis* White. Cotypes.  
Colorado (Cret.). East bank Rio Puerco, six miles below Casa Salazan, New Mexico.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 174, pl. 17, figs. 3a-3d.

= *Exogyra columbella*.

9864. *Exogyra fimbriata* Conrad. Holotype.  
Cretaceous. Western Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 154, pl. 7, figs. 2-2b.

8022. *Exogyra forniculata* White. Cotypes.  
Washita (Cret.). Bexar County, Texas.

White, Proc. U. S. Nat. Mus., 11, 1870, p. 203, pl. 4, figs. 3, 4; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 305, pl. 52, figs. 1, 2.

= *Gryphaea navia*.



9844. **Exogyra fragosa** Conrad. Holotype.  
Fredericksburg (Lower Cret.). Between El Paso and  
Frontera, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 155, pl. 8, figs. 2a, 2b.  
= **Exogyra texana**.
8646. **Exogyra læviuscula** Roemer. Plesiotypes.  
Colorado (Cret.). Linear Plateau, Southeast Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 173, pl. 17, figs. 2a-2d; Fourth Ann. Rept. U. S. Geol. Surv.,  
1884, p. 305, pl. 52, fig. 5.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 64, pl. 8, figs. 5, 6.
9883. **Exogyra matheroniana** d'Orbigny. Plesiotypes.  
Cretaceous. Between El Paso and Frontera, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 154, pl. 8, figs. 1a-c.  
= **Exogyra texana**.
13417. **Exogyra ponderosa** Roemer. Plesiotypes.  
Colorado (Cret.). East of Impracticable Ridge, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 172, pl. 14, figs. 1a-1c.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 65, pl. 7, figs. 1, 2.
22862. **Exogyra suborbiculata** (Lamarck). Plesiotypes.  
22863. Colorado (Cret.). Malachite, and Huerfano Park, Colo-  
rado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 62, pl. 5, fig. 6;  
pl. 6, figs. 1, 2; pl. 8, fig. 1.
8039. **Exogyra walkeri** White. Cotypes.  
Washita (Cret.). Salado, Bell County, Texas.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1877 (1879),  
p. 278, pl. 1, figs. 1a, 1b (as *E. walkeri*); Fourth Ann. Rept.  
U. S. Geol. Surv. 1884, p. 307, pl. 54, figs. 1, 2.
8021. **Exogyra winchelli** White. Cotypes.  
Cretaceous. Collin County, Texas.  
White, Proc. U. S. Nat. Mus., II, 1879, p. 294, pl. 2, figs. 1, 2;  
pl. 3, figs. 1, 2; Fourth Ann. Rept. U. S. Geol. Surv., 1884,  
p. 307, pl. 52, figs. 6, 7; pl. 55, figs. 1, 2.
25500. **Exomias obdurefactus** Scudder. Cotypes.  
Older Tertiary. Roan Mountains, Western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 40, pl. 9, fig. 4.
129562. **Falsifusus meyeri** (Aldrich). Plesiotype.  
Eocene. Wilcox County, Alabama.  
Grabau, Smithsonian Misc. Coll., XLIV, 1904, p. 81, pl. 17, fig. 9.
- Faphrentis. See Zaphrentis.



8046. **Fasciolaria (Piestocheilus) alleni** White. Holotype.  
Montana (Cret.). Valley of the Yellowstone River,  
Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 34, pl. 12, fig. 1a.
272. **Fasciolaria buccinoides** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci., Phila., VIII, 1856,  
p. 67.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 358,  
pl. 31, figs. 8a-8d.
289. **Fasciolaria? (Cryptorhytis) cheyennensis** (Hall and Meek).  
Plesiotypes.  
Fort Pierre (Cret.). South Fork of Cheyenne River near  
Black Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 365, pl. 19, figs.  
13a, 13b.
12256. **Fasciolaria (Cryptorhytis) contorta** (Meek and Hayden).  
Plesiotypes.  
Montana (Cret.). Old Woman Fork of Cheyenne River,  
Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 422, pl. 12, fig. 10.
258. **Fasciolaria (Piestochilus) culbertsoni** (Meek and Hayden).  
Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 360, pl. 32, figs.  
1a-1f.  
See *Fusus culbertsoni*.
12204. **Fasciolaria (Piestocheilus) culbertsoni** (Meek and Hay-  
den). Plesiotypes.  
Montana (Cret.). French Creek, Black Hills, South  
Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 423, pl. 12, fig. 11.
112255. **Fasciolaria distans** Lamarck. Plesiotype.  
New Plixene. De Leon Springs, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1891, p. 102,  
pl. 7, fig. 10.
112501. **Fasciolaria distans subsp.? apicina** Dall. Cotypes.  
Plixene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1891, p. 102,  
pl. 7, fig. 10.
112502. **Fasciolaria distans var. ? monodentata** Dall. Cotypes.  
Plixene. Calumetchatchee River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1891, p. 102,



262. **Fasciolaria? (Cryptorhytis) flexicostata** (Meek and Hayden). Holotype and paratypes.  
Fort Pierre (Cret.). Yellowstone River, near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 367, pl. 19, fig. 2.  
See *Fusus flexuocostatus*.
287. **Fasciolaria (Piestochilus?) galpiniana** (Meek and Hayden). Holotype and paratype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 362, pl. 32, figs. 2a, 2b.  
See *Fusus galpinianus*.
259. **Fasciolaria (Piestochilus) scarboroughi** (Meek and Hayden). Holotype and paratypes.  
Fox Hills (Cret.). Butte au Grés, Missouri River.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 359, pl. 32, figs. 4, 4a-d.  
See *Fusus (Pleurotoma?) scarboroughi*.
112421. **Fasciolaria (sparrowi var?) acuta** (Emmons). Plesiotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 229, pl. 13, fig. 2.
111630. **Fasciolaria (Lyrosoma) sulcosa** (Conrad). Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 100, pl. 17, figs. 9, 10.
115482. **Fasciolaria textilis** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 410, pl. 16, fig. 5.
112390. **Fasciolaria tulipa** Linnæus. Plesiotype.  
135104. Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 101, pl. 7, fig. 11.
22922. **Fasciolaria? (Cryptorhytis) utahensis** (Meek). Plesiotypes.  
Colorado (Cret.). Poison Canyon, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 153, pl. 32, figs. 3, 4.  
See *Fusus? utahensis*.
22923. **Fasciolaria? walcotti** Stanton. Holot  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 153, pl. 32, 1



20127. **Faunus marcidulus** White. Holotype.  
Chico (Cret.). Butte County, California.

White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 20, pl. 4, figs. 12, 13.

157519. **Favia merriami** Vaughan. Cotypes.  
157521. Cretaceous?. Southern California.

158295. Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 142, pl. 15, figs. 5-5c.

15056. **Faviphyllum? rugosum** Hall. Cotypes.  
Upper Carboniferous. Stansburys Island, Great Salt Lake, Utah.

Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah, 1852, p. 407, pl. 1, figs. 1a, 1b.

[The generic name *Faviphyllum* remains undefined.]

34115. **Favosites conicus** Hall. Plesiotypes.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian Territory.

Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 560.

8536. **Favosites divergens** Winchell. Plesiotype.  
Lower Carboniferous. Ewells Spring, Arizona.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 79, pl. 5, fig. 4a.

10533. **Favosites helderbergiae præcedens** Schuchert. Cotypes.  
Cobleskill (Sil.). Howes Cave, Schoharie, New York.

Schuchert, Amer. Geol., xxxi, 1903, p. 164.

- 4751c. **Fenestella ampla** Lonsdale. Plesiotype.  
4753. Carboniferous. Glendon on the Hunter, New South Wales, Australia.

Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 710, Atlas, pl. 11, figs. 1, 1a, (?2, 2a).

= *Polypora ampla*.

44081. **Fenestella bellistriata** Hall? Plesiotype and figured sections.

Waldron (Sil.). Waldron, Indiana.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 331, pl. 54, fig. 2.

43493. **Fenestella cavernosa** Ulrich. Holotype.  
Waverly (Miss.). Scioto, Ohio.

Ulrich, Bull. Denison Univ., IV, 1888, p. 69, pl. 13, figs. 7-7b.

43758. **Fenestella cestriensis** Ulrich. Cotype and figured section.  
Chester (Miss.). Sloans Valley, Kentucky.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 547, pl. 51, figs. 5, 5a.

43352. **Fenestella cingulata** Ulrich. Cotype and figured sections.  
Keokuk (Miss.). Nauvoo, Illinois.

Ulrich, Geol. Surv. Ill., VIII, 1890, p. 543, pl. 52, figs. 1-1d.



43355. **Fenestella compressa** Ulrich. Holotype.  
Keokuk (Miss.). Kings Mountain Tunnel, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 539, pl. 50, fig. 2a.
43359. **Fenestella compressa nododorsalis** Ulrich. Holotype.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 540, pl. 50, fig. 2.
43357. **Fenestella conradi** Ulrich. Holotype.  
Upper Coal Measures. Near Red Oak, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 553, pl. 52, figs. 8, 8a.
44080. **Fenestella elevatipora** Ulrich. Cotypes.  
Chester (Miss.). Chester, Illinois (Kaskaskia, Illinois, in error).  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 549, pl. 51, figs. 3, 3a.
43755. **Fenestella exigua** Ulrich. Holotype.  
Warsaw (Miss.). Monroe County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 545, pl. 51, figs. 1, 1a.
43356. **Fenestella flexuosa** Ulrich. Cotypes.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 548, pl. 51, figs. 4-4c.
- 4751a. **Fenestella fossula** Lonsdale. Plesiotype.  
Carboniferous. Glendon on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 710, Atlas, pl. 11, figs. 3, 3a, 3b.
43354. **Fenestella funicula** Ulrich. Holotype.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 542, pl. 51, fig. 6.
43809. **Fenestella herrickana** Ulrich. Plastotypes.  
Waverly (Miss.). Licking County, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 63, pl. 13, figs. 2-2d.
43358. **Fenestella inæqualis** Ulrich. Figured sections and fragment of holotype.  
Upper Coal Measures. Sangamon County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 554, pl. 54, figs. 4, 4a.
4751. **Fenestella internata** Lonsdale. Plesiotypes.  
4751b. Carboniferous. Glendon on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 710, Atlas, pl. 10, figs. 13, 13a, 13b (?15).
4754. **Fenestella media** Dana. Holotype.  
Carboniferous. Glendon on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 710, Atlas, pl. 10, figs. 14, 14a.



43494. **Fenestella meekana** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 64, pl. 13, figs. 1-1b.
17914. **Fenestella milleri** (?) Owen. Plesiotype.  
Middle Devonian. ? Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3A,  
fig. 21.
44072. **Fenestella modesta** Ulrich. Plastotype.  
Coal Measures. Knox County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 550, pl. 52, figs. 3-3b.
43349. **Fenestella multispinosa** Ulrich. Cotypes.  
43350. Keokuk (Miss.). Kings Mountain, Kentucky; Keokuk,  
Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 540, pl. 50, figs. 3-3e.
43635. **Fenestella oxfordensis** Ulrich. Holotype.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 159, pl. 6,  
fig. 13.  
= *Fenestella granulosa*.
43351. **Fenestella regalis** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Kings Mountain Tunnel, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 538, pl. 50, figs. 1, 1a; pl.  
54, fig. 5.
43495. **Fenestella regalis macra** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ. IV, 1888, p. 70, pl. 13, figs. 5, 5a.
43759. **Fenestella rudis** Ulrich. Cotypes.  
Keokuk (Miss.). Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 537, pl. 49, figs. 3a-3d.
44079. **Fenestella serratula** Ulrich. Holotype.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 544, pl. 50, figs. 5-5c.
6530. **Fenestella shumardi** Prout? Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 153,  
pl. 7, fig. 3a-c.  
= *Fenestella perelegans*.
43756. **Fenestella tenax** Ulrich. Cotypes.  
43757. Warsaw (Miss.). Monroe County, Illinois.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 546, pl. 51, figs. 2-2e.



43353. **Fenestella triserialis** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 541, pl. 50, figs. 4, 4a.
43348. **Fenestella vera** Ulrich. Cotypes.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 535, pl. 44, figs. 1, 1a; pl. 54, fig. 3.
43331. **Fenestralia sancti-ludovici** Prout. Plesiotype and figured sections.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 604, pl. 55, fig. 5.
43332. **Fenestralia sancti-ludovici compacta** Ulrich. Holotype.  
St. Louis (Miss.). Elizabethtown, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 605, pl. 59, fig. 1.
43760. **Fenestrapora occidentalis** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 558, pl. 54, figs. 7-7e.
115509. **Ficula carbacea** Guppy. Holotype.  
115510. Miocene. Saranetta, Trinidad, and Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 580, pl. 26, fig. 7.
44109. **Filifascigera megaera** Lonsdale. Plesiotype.  
Rancocas (Cret.). Vincenttown, New Jersey.  
Ulrich, Zittel's Text Book Paleontology, Eng. translation, I, 1900, p. 263, fig. 421.
23065. **Fissurella bipunctata** Stanton. Holotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 63, pl. 13, fig. 8.
1851. **Fissurella crenulata** Sowerby. Plesiotype.  
Post-tertiary. San Pedro, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, V, 1856, p. 326, pl. 5, fig. 44.
111661. **Fissurella griscomi** Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 136, pl. 24, figs. 11-14.
112702. **Fissuridea caloosaënsis** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 427, pl. 21, fig. 6.



112704. **Fissuridea carditella** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III., Pt. II, 1892,  
p. 427, pl. 21, fig. 11.
112692. **Fissuridea carolinensis** (Conrad). Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 425, pl. 21, fig. 7.
112699. **Fissuridea chipolana** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 426, pl. 23, fig. 21.
112697. **Fissuridea nucula** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 426,  
pl. 19, figs. 9, 12.
112510. **Fistulana ocalana** Dall. Holotype.  
Oligocene. Ocala, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 826, pl. 35, fig. 23.
43246. **Fistulipora astrica** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. of Ill., VIII, 1890, p. 477, pl. 47, figs. 5-5b  
pl. 48, fig. 3.
43243. **Fistulipora carbonaria** Ulrich. Holotype and figured  
section.  
Upper Coal Measures. Kansas City, Missouri.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 45, pl. 3  
figs. 1, 1a.
43284. **Fistulipora (?) clausa** Ulrich. Cotypes and figured sections.  
Kaskaskia (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 47, pl. 3  
figs. 4, 4a, 4b.  
= *Meekopora clausa*.
43286. **Fistulipora collina** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 478, pl. 47, figs. 6, 6b; p.  
48, figs. 5, 5a.  
= *Cyclotrypa collina*.



43290. **Fistulipora communis** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 476, pl. 48, figs. 1, 1a.  
=Cyclotrypa communis.
43245. **Fistulipora (Dichotrypa ?) corrugata** Ulrich. Figured sections and fragment of holotype.  
Traverse (Dev.). Thunder Bay, Michigan.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 480, pl. 48, figs. 6-6b.
43247. **Fistulipora excelens** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley (Tateville), Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 46, pl. 3, figs. 3, 3a-b.
44110. **Fistulipora flabellata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 28, pl. 7, figs. 26-26b.  
=Chiloporella flabellata.
43240. **Fistulipora foordi** Ulrich. Holotype and figured sections.  
Upper Devonian. Rockford, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 479, pl. 47, figs. 7-7a; pl. 48, figs. 4-4a.
43241. **Fistulipora? laxata** Ulrich. Figured sections and fragment of holotype.  
Trenton (Ord.). St. Andrews, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal., Cambro-Sil., Pt. II, 1889, p. 37, pl. 8, figs. 2, 2a.  
=Bythotrypa laxata.
43248. **Fistulipora monticulata** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 477, pl. 47, fig. 3a; pl. 48, figs. 2, 2a.
6554. **Fistulipora nodulifera** Meek. Cotypes.  
Upper Carboniferous. Rockford, near Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 143, pl. 5, figs. 5a-d.
43242. **Fistulipora prolifica** Ulrich. Holotype and figured sections.  
St. Louis (Miss.). Near Colesburg, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 45, pl. 3, figs. 2, 2a.



112018. **Fulgur echinatum** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 117, pl. 9, fig. 2.
20117. **Fulgur hilgardi** White. Cotypes.  
Chico (Cret.). Near Pences Ranch, Butte County, Cali-  
fornia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 22, pl. 3, figs. 2, 3.
112016. **Fulgur maximum tudiculatum** Dall. Holotype.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 115.
112026. **Fulgur pyrum æpynotum** Dall. Cotypes.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 113.
112028. **Fulgur (pyrum var.?) planulatum** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 114.
112036. **Fulgur spiniger burnsii** Dall. Cotypes.  
112037. Oligocene. Alum Bluff, and near Baileys Ferry, Chipola  
River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 110.
112033. **Fulgur spiniger nodulatum** (Conrad). Plesiotypes.  
Oligocene. Near Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 110.
112125. **Fulgur spiniger perizonatum** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 111.
112039. **Fulgur spiniger spiniger** (Conrad). Plesiotypes.  
Oligocene. Near Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 110.
112127. **Fulgur spiniger tampaensis** Dall. Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 111.
112076. **Fulgur stellatum** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 114,  
pl. 4, fig. 9.



20112. **Fulguraria gabbi** White. Cotype.  
Chico (Cret.). Centerville, Butte County, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 23, pl. 3, fig. 1.  
= *Rostellites gabbi*.
45811. **Fusispira angusta** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1079, pl. 81, figs. 28-31.
45812. **Fusispira angusta subplana** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1079, pl. 81, fig. 32.
17365. **Fusispira compacta** Hall and Whitfield. Holotype.  
Pogonip (Ord.). Pogonip Mountain, White Pine Dis-  
trict, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 236, pl. 1, fig. 25.
45813. **Fusispira convexa** Ulrich and Scofield. Cotypes.  
45814. Trenton (Ord.). Trenton Falls, New York; Goodhue  
County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1077, pl. 80, figs. 8-10.
45815. **Fusispira inflata** Meek and Worthen. Plesiotypes.  
45816. Trenton (Ord.). Kenyon and Hader, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1075, pl. 80, figs. 17, 18.
45817. **Fusispira intermedia** Ulrich and Scofield. Cotype.  
Trenton (Ord.). Stewartsville, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1076, pl. 80, figs. 20, 21.
45818. **Fusispira nobilis** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1078, pl. 80, figs. 2-4.
45819. **Fusispira planulata** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Eagle Point, Iowa.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1078, pl. 81, figs. 26, 27.
45820. **Fusispira subbrevis** Ulrich and Scofield. Cotype.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1076, pl. 80, figs. 11, 12.



45821. **Fusispira subfusiformis** Hall. Plesiotype.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1077, pl. 81, figs. 38, 39.
45822. **Fusispira sulcata** Ulrich. Holotype.  
Utica (Ord.). Rogers Gap, Scott County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, pl. 80, figs. 5-7.
1029. **Fusulina cylindrica** Fischer. Plesiotypes.  
Upper Carboniferous. Juniata, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci., Phila., for 1858, p. 260; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 14, pl. 1, figs. 6a-6i.  
See *Fusulina cylindrica ventricosa*.
6575. **Fusulina cylindrica** Fischer. Plesiotype.  
Upper Carboniferous. Near Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 140, pl. 5, figs. 3a, 3b.
8495. **Fusulina cylindrica** Fischer. Plesiotypes.  
11633. Upper Carboniferous. Various localities in Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 96, pl. 6, figs. 6a, 6b.
1029. **Fusulina cylindrica ventricosa** Meek and Hayden. Cotypes.  
Upper Carboniferous. Juniata, on Blue River, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 261.  
*Fusulina cylindrica*.
- Fusus* sp. Owen = *Mazzalina oweni*.
112052. **Fusus (Fusus) ballista** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 127, pl. 8, fig. 4.
07402. **Fusus (Fusus) burnsii** Dall. Holotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 128.  
See *Helprinia burnsii*.
113220. **Fusus calusaensis** Helprina Plesiotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 266, pl. 14, fig. 5.  
See *Helprinia calusaensis*.



112349. **Fusus caloosaënsis carolinensis** Dall. Holotype.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 234, pl. 14, fig. 4a.  
See *Heilprinia caloosaënsis carolinensis*.
12304. **Fusus cheyennensis** Whitfield. Holotype.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 424, pl. 12, fig. 9.
271. **Fusus contortus** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 65.  
= *Turris* (*Surcula*?) *contortus*.
3551. **Fusus corpulentus** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., 1849, p. 728, Atlas, pl. 20,  
fig. 4.—Dall, Proc. U. S. Nat. Mus., Vol. XIV, 1891, p. 179.
258. **Fusus culbertsoni** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 66.  
= *Fasciolaria* (*Piestochilus*) *culbertsoni*.
256. **Fusus dakotaensis** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 65.  
= *Fusus* (*Serrifusus*) *dakotensis*.
256. **Fusus (Serrifusus) dakotensis** (Meek and Hayden).  
Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, pp. 374-375, pl. 31,  
fig. 11d; pl. 32, figs. 6a, 6b (7a, var.).  
See *Fusus dakotaensis*.
112051. **Fusus (Papillina) dumosus** (Conrad). Plesiotype.  
Oligocene. Ocala, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 125,  
pl. 10, fig. 6a.
112381. **Fusus (Fusus) equalis** (Emmons). Plesiotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 126;  
Pt. II, 1892, p. 234, pl. 14, fig. 3b.  
See *Heilprinia equalis*.



262. **Fusus flexuocostatus** Meek and Hayden. Cotypes.  
 Montana (Cret.). Yellowstone River, near Miles City,  
 Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 66.  
 =Fasciolaria (Cryptorhytis) flexicostata.
7886. **Fusus (Neptunea?) gabbi** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 504.—  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
 p. 317, pl. 9, fig. 9a.  
 =Fusus gabbi.
7886. **Fusus gabbi** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 151, pl. 31,  
 fig. 14.  
 See Fusus (Neptunea?) gabbi.
287. **Fusus galpinianus** Meek and Hayden. Holotype.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 65.  
 =Fasciolaria (Piestochilus) galpiniana.
253. **Fusus intertextus** Meek and Hayden. Holotype.  
 Montana (Cret.). Yellowstone River, near Miles City,  
 Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 139.  
 =Pyrifusus (Neptunella) intertextus.
8917. **Fusus marnochi** Heilprin. Holotype.  
 Eocene. Atascosa County, Texas.  
 Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 151. pl. on p. 150,  
 fig. 6.
147035. **Fusus montgomeriensis** Vaughan. Holotype.  
 Jacksonian (Eocene). Montgomery, Louisiana.  
 Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 35, pl. 3, fig. 2.
257. **Fusus newberryi** Meek and Hayden. Holotype and para-  
types.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
 p. 66.  
 =Pyrifusus (Neptunella) newberryi.
112054. **Fusus (Chrysodomus?) nexilis** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 128, pl. 8, fig. 4 [6].



112053. **Fusus? quinquespinus** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 128;  
Pt. II, 1892, p. 234, pl. 20, fig. 8.
259. **Fusus (Pleurotoma?) scarboroughi** Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Butte au Grés, Missouri River.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 139.  
= *Fasciolaria (Piestocheilus) scarboroughi*.
12305. **Fusus shumardi** Hall and Meek. Plesiotype.  
Fort Benton (Cret.). East Fork of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 424, pl. 12, figs. 7, 8.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 150, pl. 31, fig. 13.
254. **Fusus subturritus** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Near Grand River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 139.  
= *Pyrifusus (Neptunella) subturritus*.
7885. **Fusus (Neptunea?) utahensis** Meek. Cotype.  
Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 505.  
= *Fasciolaria? (Cryptorhytis) utahensis*.  
See *Fusus utahensis*.
7885. **Fusus? utahensis (Meek)**. Cotype.  
Colorado (Cret.). Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 34, pl. 12, fig. 2a.  
= *Fasciolaria? (Cryptorhytis) utahensis*.  
See *Fusus (Neptunea?) utahensis*.
255. **Fusus vauhani** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Near mouth of Heart River, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 138.  
= *Cantharus (Cantharulus) vauhani*.
22921. **Fusus (Neptunea?) venenatus** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 152, pl. 32, figs. 1, 2.
135892. **Gafrarium (Gouldia) altum** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1 p. 1249, pl. 57, fig. 5.



114721. **Gafrarium (Gouldia) erosum** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1248, pl. 57, fig. 10.
3498. **Galerites oregonensis** Dana. Cotypes.  
Miocene. Astoria, Oregon.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 729, pl. 21, figs.  
5, 6a.
26439. **Gastrioceras branneri** Smith. Holotype.  
Lower Coal Measures. Pilot Mountain, Carroll County,  
Arkansas.  
Smith, Proc. Amer. Phil. Soc., XXXV, 1897, p. 257, pl. 23, figs.  
1-6; Mon. XLII, U. S. Geol. Surv., 1903, p. 83, pl. 11, figs.  
8-13.
23872. **Gastrioceras compressum** Hyatt. Cotypes.  
Upper Carboniferous?. Colorado River near Bend, San  
Saba County, Texas.  
Hyatt, Second Ann. Rept. Geol. Surv. Texas, 1891, p. 355, text  
figs. 57-59.—Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 86,  
pl. 9, figs. 1-3.
35090. **Gastrioceras globulosum** (Meek and Worthen). Plesiotype.  
Upper Coal Measures. Graham, Texas.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 89, pl. 21, figs. 7-9.
14176. **Gastrioceras kingi** (Hall and Whitfield). Cotypes.  
Lower Carboniferous?. Near Eberhardt Mills, White  
Pine District, Nevada.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 92, pl. 4, figs. 4-8.  
See *Goniatites kingi*.
135742. **Gastrochæna ovata rotunda** Dall. Cotypes.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 825.
73295. **Gemma gemma** (Totten). Plesiotype.  
Pleistocene. Massachusetts Bay at Point Shirley.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1331.  
See *Gemma purpurea totteni*.
61170. **Gemma gemma purpurea** (Lea). Plesiotypes.  
Pleistocene. Texas coast at Corpus Christi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1332.  
See *Gemma purpurea*.



115174. **Gemma magna** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1330, pl. 57, fig. 4.
144643. **Gemma magna virginiana** Dall. Cotypes.  
Miocene. Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1330.
61170. **Gemma purpurea** (Lea). Plesiotypes.  
Pleistocene. Texas coast at Corpus Christi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
pl. 24, figs. 2, 4, 4b.  
= *Gemma gemma purpurea*.
73295. **Gemma purpurea totteni** Dall. Plesiotype.  
Pleistocene. Massachusetts Bay at Point Shirley.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
pl. 24, figs. 1-3.  
See *Gemma gemma*.
114915. **Gemma trigona** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1330, pl. 57, fig. 8.
38135. **Genentomum validum** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 329, pl. 30,  
figs. 2, 3; Foss. Insects N. America I, 1890, p. 293, pl. 16,  
figs. 2, 3.
26470. **Gennæocrinus arkonensis** Whiteaves. Cotypes.  
Hamilton (Dev.). Bartletts Mills, Ontario, Canada.  
Whiteaves, Cont. to Canadian Pal., I, Pt. V, 1898, pp. 373, 374.
35149. **Gennæocrinus kentuckiensis** (Shumard). Plesiotype.  
Hamilton (Dev.). Beargrass quarry, Louisville, Kentucky.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 80, text  
fig. 9.
38148. **Genopteryx constricta** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 327, pl. 29,  
fig. 11; Foss. Insects N. America, I, 1890, p. 291, pl. 15, fig. 11.
38065. **Gerablattina abdicata** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 118, pl. 10,  
fig. 6.



38176. *Gerablattina cassivici* Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 117, pl. 10,  
figs. 2, 3.
38172. *Gerablattina concinna* Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 119, pl. 10,  
figs. 4, 5.
38063. *Gerablattina deducta* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 123, pl. 10,  
fig. 15.
38062. *Gerablattina diversinervis* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 115, pl. 9,  
fig. 15.
38066. *Gerablattina eversa* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 112, pl. 10,  
fig. 14.
38058. *Gerablattina fascigera* Scudder. Cotypes.  
Upper Coal Measures. Campbells Ledge, near Pittston,  
Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 113, pl. 6,  
figs. 1, 2; Foss. Insects N. America, I, 1890, p. 133, pl. 6,  
figs. 1, 2.
38059. *Gerablattina fraterna* Scudder. Holotype.  
Coal Measures. East Providence, Rhode Island.  
Scudder, Bull. No. 101, U. S. Geol. Surv., 1893, p. 19, pl. 2, figs.  
d, f; *ibid.*, No. 124, 1895, p. 124, pl. 10, fig. 16.
38173. *Gerablattina inculta* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 113, pl. 9, fig. 16.
38174. *Gerablattina lata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 125, pl. 11,  
fig. 2.
38170. *Gerablattina ovata* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 126, pl. 11, fig. 4.
38061. *Gerablattina perita* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 114, pl. 9, fig. 17.



38064. **Gerablattina permanenta** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 124, pl. 10,  
fig. 12.
38175. **Gerablattina radiata** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 124, pl. 11, fig. 1.
38171. **Gerablattina rotundata** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 126, pl. 11,  
fig. 3.
38060. **Gerablattina scapularis** Scudder. Holotype.  
Coal Measures. Pawtucket, Rhode Island.  
Scudder, Bull. No. 101, U. S. Geol. Surv., 1893, p. 19, pl. 2, fig. 1;  
ibid., No. 124, 1895, p. 124, pl. 10, fig. 7.
38177. **Gerablattina uniformis** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 120, pl. 10,  
figs. 8-11.
37985. **Geralinura carbonaria** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 455, pl. 39,  
figs. 1, 3, 4; Foss. Insects N. America, 1890, p. 431, pl. 31,  
figs. 1, 3, 4.
37961. **Geraphrynus carbonarius** Scudder. Cotypes.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 446, pl. 40,  
figs. 1, 9, 10, 12; Foss. Insects N. America, 1890, p. 423, pl. 32,  
figs. 1, 9, 10, 12.
37970. **Geraphrynus (Architarbus) elongatus** (Scudder). Holotype.  
Upper Coal Measures. Braidwood, Illinois.  
Fritsch, Pal. Arachniden, 1904, p. 33, text fig. 37.  
See Architarbus elongatus.
38141. **Gerapompus extensus** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 326, p<sup>1</sup>  
figs. 5, 8; Foss. Insects N. America, I, 1890, p. 290, 1  
figs. 5, 8.



38136. **Gerarus vetus** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 344, pl. 31,  
fig. 6; Foss. Insects N. America, I, 1890, p. 308, pl. 17, fig. 6.
41951. **Gerasaphes ulrichana** Clarke. Holotype.  
Trenton (Ord.). Covington, Kentucky.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 710, figs. 14-16.
37966. **Geratarbus lacoei** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 448, pl. 40,  
fig. 11; Foss. Insects N. America, 1890, p. 424, pl. 32, fig. 11.
37965. **Geratarbus scabrum** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 448, pl. 30,  
fig. 5; Foss. Insects N. America, 1890, p. 430, pl. 31, fig. 5.
21698. **Gervillia longa** Geinitz. Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 29, pl. 4, fig. 2.
7795. **Gervillia montanaensis** Meek. Cotypes.  
Jurassic. Near Lower Canyon of Yellowstone River,  
Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 145, pl. 37, figs. 1a, 1b.
8023. **Gervillia mudgeana** White. Cotypes.  
Mentor (Cret.). Saline County, Kansas.  
White, Proc. U. S. Nat. Mus., II, 1879, p. 295, pl. 5, figs. 3, 4;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 16, pl.  
14, figs. 3a, b.
22867. **Gervillia propleura** (Meek). Plesiotypes.  
Colorado (Cret.). Coalville, Utah and Huerfano Park,  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 74, pl. 10, figs. 1-3.  
See *Avicula* (Pseudoptera) *propleura*, A. (P.) *rhyto-*  
*phora*, and *Pteria* (Pseudopteria) *propleura*.
7843. **Gervillia recta** Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Deer Creek, near North Platte,  
Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 441.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 66, pl. 29,  
figs. 1a, 1b.



12319. **Gervillia recta** Meek. Plesiotype.  
Jurassic. Near Sun Dance Hills, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 358, pl. 4, fig. 3.
356. **Gervillia subtortuosa** Meek and Hayden. Holotype and  
paratype.  
Fort Pierre (Cret.). Missouri River, east of Fort Ben-  
ton, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
p. 276.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 65,  
pl. 16, figs. 7a-c.
30220. **Gervilliopsis invaginata** (?) White. Plesiotype.  
Buda (Lower Cret.). Shoal Creek, Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 19, pl. 5,  
fig. 12.
113010. **Gibbula americana** Dall. Holotype.  
Miocene. Near Natural Well, Duplin County, North  
Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 389, pl. 22, fig. 32.
39970. **Gilbertsocrinites americanus** Troost. Chiotypes.  
Ordovician. Near Knoxville, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
8249. **Glauconia coalvillensis** (Meek). Plesiotypes.  
8633. Colorado (Cret.). Coalville, Utah.  
18946. Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 132, pl. 28,  
fig. 11; pl. 29, figs. 1, 2.  
See Cassiope whitfieldi and Turritella coalvillensis.
8518. **Glaucnome nereides** White. Cotypes.  
Upper Carboniferous. Confluence of White Mountain and  
Black rivers, Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv., W. 100th Merid., 8vo.,  
1874, p. 18; Rept. U. S. Geogr. Surv., W. 100th Merid., IV,  
Pt. I, 1877, p. 105, pl. 7, figs. 5a-e.  
= Pinnatopora nereides.
- Glycimeris. See Glycymeris.
8051. **Glycymeris berthoudi** White. Holotype.  
Fort Pierre (Cret.). Fifteen miles west of Greeley,  
Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 299,  
pl. 6, figs. 1a, 1b.
20090. **Glycymeris ? dalli** White. Cotype.  
Jurassic. Wrangel Bay, Alaska.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 66, pl. 14, figs.



114941. **Glycymeris duplinensis** Dall. Cotypes.  
Miocene. Magnolia, Duplin County, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III. Pt. IV, 1898, p. 613,  
pl. 34, figs. 6, 7.
13320. **Glycymeris estrellanus** Conrad. Holotype.  
Miocene. Panza and Estrella valleys, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 194, pl. 7, fig. 5.
115671. **Glycymeris jamaicensis** Dall. Cotypes.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 608.
180. **Glycymeris occidentalis** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 250, pl. 39, figs.  
9a, 9b.  
See *Panopea occidentalis*.
113177. **Glyphostoma johnsoni** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
223, pl. 14, fig. 6.
163977. **Glyphostoma scoptes** Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl.  
60, fig. 15.
97343. **Glyphostoma watsoni** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 40,  
pl. 2, fig. 7.
35409. **Glyptocrinus decadactylus** Hall. Plesiotype.  
Lorraine (Ord.). Covington, Kentucky.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, fig. 16.
40768. **Glyptocrinus decadactylus** Hall. Plesiotypes.  
42342. Lorraine (Ord.). Morrow, Ohio; Covington, Kentucky;  
42343. Cincinnati, Ohio.  
Wachsmuth and Springer, North Amer. Crinoidea Camerata,  
Mem. Mus. Comp. Zool., XXI, 1897, p. 270, pl. 20, figs.  
4b, 4c; pl. 21, fig. 4a.
40762. **Glyptocrinus dyeri** Meek. Plesiotypes.  
40767. Lorraine (Ord.). Jefferson County, Indiana; Cincinnati,  
42214. Ohio.  
Wachsmuth and Springer, North Amer. Crinoidea Camerata,  
Mem. Mus. Comp. Zool., XXI, 1897, p. 271, pl. 20, figs. 1a, 1c;  
pl. 21, figs. 3a-c, 6.



40771. **Glyptocrinus ? fornshelli** Miller. Plesiotype.  
 Richmond (Ord.). Waynesville, Ohio.  
 Wachsmuth and Springer, North Amer. Crinoidea Camerata,  
 Mem. Mus. Comp. Zool., XXI, 1897, p. 267, pl. 20, fig. 3;  
 pl. 21, fig. 5.
40759. **Glyptocrinus harrisi** Miller. Holotype.  
 Richmond (Ord.). Waynesville, Ohio.  
 Miller, Journ. Cincinnati Soc. Nat. Hist., IV, 1881, p. 74, pl. 1,  
 figs. 4, 4a.  
 See *Compsocrinus harrisi*.
40760. **Glyptocrinus miamiensis** Miller. Holotype.  
 Richmond (Ord.). Waynesville, Ohio.  
 Miller, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 34, pl. 1,  
 fig. 1.  
 See *Compsocrinus miamiensis*.
42145. **Glyptocrinus nealli** Hall. Cotype.  
 Richmond (Ord.). Warren County, Ohio.  
 Hall, Twenty-fourth Rept. New York State Cab. Nat. Hist., 1872,  
 p. 206, pl. 5, fig. 19.  
 = *Reteocrinus nealli*.
40772. **Glyptocrinus sculptus** Miller. Cotypes.  
 Richmond (Ord.). Waynesville, Ohio.  
 Miller, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 37, pl. 1,  
 fig. 2.  
 = *Rhaphanocrinus sculptus*.
44094. **Glyptopora elegans** (Prout). Cotype and figured sections.  
 Warsaw (Miss.). Warsaw, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 518, pl. 78, figs. 10a-10e.
43379. **Glyptopora keyserlingi** (Prout). Plesiotype.  
 Keokuk (Miss.). Nauvoo, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 78, figs. 4-4b.
43436. **Glyptopora megastoma** Ulrich. Holotype.  
 Keokuk (Miss.). Keokuk, Iowa.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 518, pl. 78, figs. 5, 5a.  
 = *Phractopora megastoma*.
43761. **Glyptopora plumosa** (Prout). Plesiotype.  
 Warsaw (Miss.). Warsaw, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 512, pl. 78, figs. 3b, 3c.
43762. **Glyptopora punctipora** Ulrich. Figured fragment of  
 holot  
 Chester (Miss.). Monroe County, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 519, pl. 78, figs. 9, 9a



43380. **Glyptopora saganella caliculosa** Ulrich. Coty  
 Warsaw (Miss.). Warsaw, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 514.
112263. **Glyptostyla panamensis** Dall. Holoty  
 Eocene. Vamos-Vamos Station, Panama Canal, Colombia.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1894,  
 p. 233, pl. 13, fig. 5.
112296. **Gnathodon clathrodon** Conrad. Plesioty  
 Pliocene. Neuse River, North Carolina.  
 Dall, Proc. U. S. Nat. Mus., XVII, 1894, p. 99, pl. 7, fig. 9.  
 = *Rangia clathrondonta*.
106986. **Gnathodon cuneatus** Gray. Plesioty  
 Pliocene. Caloosahatchie River, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVII, 1894, p. 97, pl. 7, figs. 1, 2.  
 = *Rangia cuneata*.
107033. **Gnathodon johnsoni** Dall. Holot  
 Miocene. Near Vernal, Mississippi.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1894,  
 p. 337, pl. 22, fig. 18; Proc. U. S. Nat. Mus., XVII, 1894, p. 97,  
 pl. 7, fig. 7.  
 = *Rangia johnsoni*.
6833. **Gnathodon lecontei** Conrad. Holot  
 Pliocene. Carisco Creek, Colorado Desert, Arizona.  
 Dall, Proc. U. S. Nat. Mus., XVII, 1894, p. 100, pl. 7, fig. 4.  
 = *Rangia lecontei*.
13984. **Gomphoceras suboviforme** Walcott. Holot  
 Upper Devonian. The Gate, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 20, pl. 17, fig. 1.  
 S. Sa.
21706. **Goniatites baylorensis** White. Holot  
 Permian. Military Crossing of the Big Wichita, Baylor  
 County, Texas.  
 White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 19, pl. 2, figs. 1, 2.  
 = *Paralegoceras baylorensis*.
13983. **Goniatites desideratus** Walcott. Coty  
 Middle Devonian. Combs Peak, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 203, pl. 17, fig. 1.
33275. **Goniatites globulosus excelsus** Meek. Holot  
 Upper Carboniferous. Near Osage, Kansas.  
 Meek, Bull. No. 6, U. S. Geol. Surv. Terr., I, 1875, p. 445.  
 = *Gastrioceras excelsum*.



14176. **Goniatites kingii** Hall and Whitfield. Cotypes.  
Lower Carboniferous?. Near Eberhardt Mills, White Pine  
District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 279, pl. 6, figs. 9-14.  
= *Gastrioceras kingii*.
14993. **Goniatites lutheri** Clarke. Holotype.  
Naples (Dev.). Parish Gully, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 50, pl. 2, fig. 8.  
= *Probeloceras lutheri*.
14994. **Goniatites nodifer** Clarke. Cotypes.  
Genesee (Dev.). Genundewah, Canandaigua Lake, New  
York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 21.  
= *Manticoceras nodifer*.
696. **Goniobasis arcta** (Meek). Cotype.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyo-  
ming.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 366, pl.  
5, fig. 5.  
See *Melania arcta*.
8153. **Goniobasis chrysallis** Meek. Cotypes.  
Bear River (Cret.). Near Sulphur Creek, Bear River,  
Utah.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 316.—  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I,  
1883, p. 91, pl. 30, figs. 6a, 6b; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 462, pl. 6, figs. 13, 14.  
= *Pachymelania chrysallis*.
8157. **Goniobasis chrysalloidea** White. Cotypes.  
Bear River (Cret.). Sulphur Creek, Bear River Valley,  
Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 92, pl. 30, figs. 5a, 5b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 462, pl. 6, figs. 10, 11.  
= *Pachymelania chrysalloidea*.
8152. **Goniobasis cleburni** White. Cotypes.  
Bear River (Cret.). Sulphur Creek, Bear River Valley,  
Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 91, pl. 30, figs. 4a-d; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 462, pl. 6, figs. 7-9.  
= *Pachymelania cleburni*.



2142. **Goniobasis convexa** (Meek and Hayden). Holotype and paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 562, text fig. 71, pl. 42, figs. 2a, 2b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 463, pl. 26, figs. 6, 7.  
See *Melania convexa*.
2143. **Goniobasis convexa impressa** (Meek and Hayden). Holotype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 563, pl. 42, figs. 2c, 2d.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 463, pl. 26, figs. 8, 9.
8161. **Goniobasis endlichi** White. Cotypes.  
Bear River (Cret.). Seven miles north of Evanston, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 92, pl. 30, figs. 7a-c; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 463, pl. 7, figs. 7-9.  
= *Lioplax endlichi*.
20077. **Goniobasis filifera** White. Cotypes.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 29, pl. 2, fig. 3.
8203. **Goniobasis gracilenta** Meek. Holotype and plesiotype.  
12482. Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 568, pl. 42, fig. 3; and text fig. 74 on p. 560.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 463, pl. 20, figs. 12, 13.
28048. **Goniobasis ? increbescens** Stanton. Holotype and paratypes.  
Dakota (Cret.). Fawn Creek, Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 633, pl. 73, fig. 7.
8137. **Goniobasis ? insculpta** Meek. Cotypes.  
Laramie (Cret.). Rock Spring, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 515.  
= *Melania insculpta*.
2144. **Goniobasis invenusta** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 564, pl. 42, figs. 1a, 1b, 1c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 463, pl. 20, fig. 1.  
See *Melania invenusta*.
23120. **Goniobasis jeffersonensis** White. Plesiotype.  
Cretaceous. Five miles west of mouth of Fawn Creek, Nebraska.  
White, Proc. U. S. Nat. Mus. XVII, 1894, p. 134, pl. 5, fig. 1.



19016. **Goniobasis macilenta** White. Holotype.  
 Bear River (Cret.). Sulphur Creek, Bear River Valley,  
 Wyoming.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
 p. 93, pl. 30, fig. 10a; Third Ann. Rept. U. S. Geol. Surv.,  
 1883, p. 462, pl. 6, fig. 12.  
 = *Pachymelania* ? *macilenta* White.
2138. **Goniobasis nebrascensis** (Meek and Hayden).  
 2139. Holotype and paratypes.  
 2160. Laramie (Cret.). Fort Clarke and mouth of Yellowstone  
 River, North Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 565, text fig.  
 73, pl. 43, figs. 12a-h.—White, Third Ann. Rept. U. S. Geol.  
 Surv., 1883, p. 463, pl. 26, figs. 15, 16.  
 See *Melania nebrascensis*.
8602. **Goniobasis nebrascensis** (Meek and Hayden). Plesiotypes.  
 20076. Eocene. Wales, Sanpete County, Utah.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 213, pl. 21, figs. 9a-9c; Bull. No. 34, U. S. Geol. Surv.,  
 1886, p. 28, pl. 2, figs. 4, 5.
2184. **Goniobasis? omitta** (Meek and Hayden). Holotype.  
 Laramie (Cret.). Mouth of Judith River, Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 568, pl. 42, figs.  
 4a-4c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p.  
 463, pl. 26, fig. 10.  
 See *Melania omitta*.
28947. **Goniobasis? pealei** Stanton. Cotypes.  
 Dakota? (Cret.). Three Forks Valley, Montana, and  
 Yellowstone National Park.  
 Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 632, pl.  
 75, fig. 6.
691. **Goniobasis simpsoni** (Meek). Cotype.  
 Eocene. Hams Fork, northeast of Fort Bridger, Wyo-  
 ming.  
 Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 365,  
 pl. 5, fig. 1e.—White, Third Ann. Rept. U. S. Geol. Surv.,  
 1883, p. 464, pl. 31, fig. 2.
2145. **Goniobasis sublævis** (Meek and Hayden). Holotype and  
 paratype.  
 Laramie (Cret.). Mouth of Judith River, Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 567, pl. 4  
 figs. 5a, 5b.—White, Third Ann. Rept. U. S. Geol. Surv.  
 1883, p. 463, pl. 26, fig. 18.  
 See *Melania sublævis*.



19180. *Goniobasis? subtortuosa* (Meek and Hayden). **Holotype**  
and **paratypes**  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 569, text figs.  
75, 76, pl. 42, figs. 17a, 17b. — White, Third Ann. Rept. U. S.  
Geol. Surv., 1883, p. 463, pl. 27, fig. 34.  
See *Melania subtortuosa*.
8603. *Goniobasis tenera* Hall. **Plesiotypes.**  
Eocene. Head of Soldiers Fork, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1877,  
p. 212, pl. 21, figs. 11a-11c.
8887. *Goniobasis tenera* Hall. **Plesiotypes.**  
Eocene. Wyoming, Colorado, and Utah.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 464, pl. 31,  
figs. 1-30.  
[The above includes *G. simpsoni* Meek, *G. nodulifera* Meek, *G.*  
*carteri* Conrad, *G. columinis* White, and *G. arcta* Meek. — T. V.  
Stanton.]
2141. *Goniobasis tenuicarinata* (Meek and Hayden). **Holotype.**  
Laramie (Cret.). Near Fort Union, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 566, pl. 43, figs.  
14a-14c. — White, Third Ann. Rept. U. S. Geol. Surv., 1883, p.  
463, pl. 26, fig. 11. Bull. No. 34, U. S. Geol. Surv., 1886, p. 2,  
pl. 2, fig. 2.  
See *Melania tenuicarinata*.
8507. *Goniobasis tenuicarinata* (Meek and Hayden). **Plesiotypes.**  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 25, pl. 2, fig. 1.
46827. *Gonioceras occidentale* Hall. **Plesiotypes.**  
Stones River (Ord.). Dixon, Illinois.  
Clark, Geol. and Nat. Hist. Surv. Minn., Final Rept., II, Pt. 1,  
1867, p. 748, pl. 57, fig. 6.
432. *Goniomya americana* Meek and Hayden. **Holotype.**  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VII, 1877, p. 12.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 567, pl. 44,  
figs. 20-22.
12307. *Goniomya borealis* Meek. **Holotype.**  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., L, No. 1, 1897,  
p. 367, pl. 2, fig. 2.  
See *Pholadomya Goniomya borealis*.
7814. *Goniomya montanaensis* Meek. **Holotype.**  
Jurassic. Near Lower Canyon of Yellowstone, Park  
Montana.  
White, Second Ann. Rept. U. S. Geol. Surv. Terr., 1872, p. 187,  
Pl. 1, fig. 18. Bull. No. 57, fig. 2.



13890. **Goniophora perangulata** (Hall). Plesiotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 171, pl. 15, fig. 10.
12234. **Goniopygus zitteli** Clark. Cotypes.  
Fredericksburg (Lower Cret.). Texas.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, 76; Bull. No. 97,  
U. S. Geol. Surv., 1893, p. 53, pl. 18, figs. 2a-2d; pl. 19, figs.  
1a-1e.
43475. **Goniotrypa bilateralis** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Stony Mountain, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal., Cambro-Sil., Pt. II,  
1889, p. 41, text figs. 1-3, pl. 9, fig. 1.
13403. **Gonostoma yatesii** Cooper. Plesiotypes.  
John Day (Miocene). Eastern Oregon.  
White, Bull. No. 18, U. S. Geol. Surv., 1885, p. 16, pl. 3, figs. 8-12.
37969. **Græophonus carbonarius** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 454, pl. 40,  
fig. 3; Foss. Insects N. America, 1890, p. 430, pl. 32, fig. 3.
201. **Grammatodon inornatus** (Meek and Hayden). Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 90, pl. 3, figs. 9, a, b.  
See *Arca* (*Cucullæa*) *inornata*.
12398. **Grammatodon? vancouverensis** (Meek). Holotype.  
Nanaimo (Cret.). Komooks, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 356,  
pl. 3, figs. 5, a.  
= *Nemodon vancouverensis*.  
See *Arca vancouverensis*.
14385. **Grammysia arcuata** (Conrad). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 245, pl. 20, fig. 5.
14384. **Grammysia hannibalensis** (Shumard). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 244, pl. 20, fig. 4.
13895. **Grammysia minor** Walcott. Cotype.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 174, pl. 15, 1  
15, 15a.



3115. *Grammysia Pholadella?* *parallela* Hall. Plesiotype.  
Middle Devonian. Ereré, Para. Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. New York, XI. 1875,  
p. 120.  
= *Pholadella parallela*.
3200. *Granatocrinites cidariformis* Troost. Chiotypes.  
Mississippian. Bedford County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II. 1850, p. 62.  
[Referred by Harbach to *Cidaroblastus granularis* Roemer.]
3211. *Granatocrinus lotoblastus* White. Holotype.  
Lower Carboniferous. Ewell's Spring, Arizona.  
White, Prelim. Rep. U. S. Geol. Surv. W. South Mex., 1871,  
p. 13. Rep. U. S. Geol. Surv. W. South Mex., IV. Pl. 1,  
figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
3220. *Granatocrinus lotoblastus* White? Plesiotype.  
Lower Carboniferous. Teton Range, just west of Idaho-  
Wyoming boundary.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1874, p. 122.
3221. *Graptocrinus arida* White. Holotype.  
Beimont, Nev. Five miles northwest of Beineville,  
Utah.  
White, Jour. California Soc. Nat. Hist., V. 1882, p. 102, pl. 1,  
figs. 1, 2.  
= *Graptocrinus peregrinus*.
3222. *Graptocrinus Diphlograptus hyperbolicus* White. Holotype.  
Beimont, Nev. Five miles north of Beineville, Nevada.  
White, Prelim. Rep. U. S. Geol. Surv. W. South Mex., 1871,  
p. 13. Rep. U. S. Geol. Surv. W. South Mex., IV. Pl. 1,  
figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
3223. *Graptocrinus Diphlograptus praecox* Hall? Plesiotype.  
Beimont, Nev. Five miles north of Beineville, Nevada.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1874, p. 122.
3224. *Graptocrinus quadrangulatus* Hall? Plesiotype.  
Beimont, Nev. Five miles north of Beineville, Nevada.  
White, Prelim. Rep. U. S. Geol. Surv. W. South Mex., 1871,  
p. 13. Rep. U. S. Geol. Surv. W. South Mex., IV. Pl. 1,  
figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
3225. *Graptocrinus Diphlograptus tenuis* White. Holotype.  
Beimont, Nev. Five miles north of Beineville, Nevada.  
White, Prelim. Rep. U. S. Geol. Surv. W. South Mex., 1871,  
p. 13. Rep. U. S. Geol. Surv. W. South Mex., IV. Pl. 1,  
figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.



114609. **Grateloupia (Cytheriopsis) alumensis** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1239, pl. 52, fig. 14.
1843. **Gratelupia ? mactropsis** Conrad. Holotype.  
Miocene. Isthmus of Darien.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 328, pl. 6, fig. 54.
14437. **Griffithides portlocki** (Meek and Worthen). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 266, pl. 24, figs.  
4-4b.
115525. **Gryphæa athyroides** Guppy. Holotype.  
Eocene. San Fernando, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 583,  
pl. 16, fig. 17.  
= *Ostrea athyroides*.
318. **Gryphæa calceola nebrascensis** Meek and Hayden. Cotypes.  
1881. Jurassic. Head of Wind River Valley, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1861, p. 437;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 74, pl. 3, figs. 1a-f.—Jackson, Mem. Bost. Soc. Nat.  
Hist., IV, No. 8, 1890, p. 317, pl. 24, figs. 23, 24.
12540. **Gryphæa calceola nebrascensis** Meek and Hayden. Plesiotypes.  
Jurassic. Sheep Creek, Uinta Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 286, pl. 7, fig. 11.
28952. **Gryphæa calceola nebrascensis** Meek and Hayden. Plesiotypes.  
28953. Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 612,  
pl. 72, figs. 5-7.
- 28769 **Gryphæa corrugata** Say. Plesiotypes.  
to Washita (Lower Cret.). Texas, Indian Territory, and  
28773. Kansas.  
Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 53,  
pl. 5, fig. 8; pl. 6, figs. 1-6, 8, 9; pl. 7, figs. 1-3; pl. 8, figs.  
1-17; pl. 12, figs. 1, 2; pl. 18, figs. 1-3; pl. 19, fig. 2.  
See *Gryphæa pitcheri*.
28774. **Gryphæa corrugata belviderensis** Hill and Vaughan. Cotype  
Washita (Lower Cret.). Black Hills, Kansas.  
Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 5,  
pl. 9, figs. 1-3; pl. 10, figs. 1, 2; pl. 11, figs. 1, 2.



22233. *Gryphæa corrugata tucumcarii* (Marcou). Plesiotypes.  
Washita (Lower Cret.). Texas, and Mesa Tucumcari,  
New Mexico.

Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 56,  
pl. 13, figs. 4, 5; pl. 14, figs. 1, 2.

28776. *Gryphæa marcoui* Hill and Vaughan. Cotypes.  
to Fredericksburg (Lower Cret.). Near Austin and Edwards  
28778. Plateau, Texas.

Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 50,  
pl. 2, figs. 1-15, 17-21; pl. 3, figs. 1-10; pl. 4, figs. 1-4; pl. 5,  
figs. 1-7.

30226. *Gryphæa mucronata* Gabb. Plesiotypes.  
Buda (Lower Cret.). Near Austin, Texas.

Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 21, pl. 9,  
figs. 1-4.

28779. *Gryphæa mucronata* Gabb. Plesiotypes.  
Del Rio (Lower Cret.). Near Linders Spring, Travis  
County, Texas.

Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 63,  
pl. 23, figs. 4-14; pl. 24, figs. 1-16; pl. 25, figs. 1-8; pl. 26,  
figs. 4, 5; pl. 27, figs. 1-5; pl. 28, figs. 1-5; pl. 29, figs. 1-6;  
pl. 30, figs. 1-5.

28780. *Gryphæa navia* (Hall). Plesiotypes.  
28781. Washita (Lower Cret.). Near Denison, Texas, and Black  
Hills, Kansas.

Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 57,  
pl. 13, figs. 1-3; pl. 18, figs. 4-12.

See *Exogyra forniculata*.

8775. *Gryphæa newberryi* Stanton. Cotypes.  
Colorado (Cret.). Southern Utah.

Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 60, pl. 5, figs.  
1-5.

See *Gryphæa pitcheri* var.

9880. *Gryphæa pitcheri* Morton. Plesiotypes.  
Cretaceous. Leon Springs, Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 155, pl. 7, figs. 3a-d; pl. 21, figs. 3a-3c.

= *Gryphæa corrugata*.

9733. *Gryphæa pitcheri* Morton. Plesiotypes.  
Cretaceous. Texas.

White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 302, pl. 49,  
figs. 1-3.

8653. *Gryphæa pitcheri* Morton var. Plesiotypes.  
Colorado (Cret.). Southern Utah and Northern New  
Mexico.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 171, pl. 17, figs. 1a-f.

= *Gryphæa newberryi*.



12369. **Gryphæa planoconvexa** Whitfield. Plesiotypes.  
 28931. Jurassic. Yellowstone National Park.  
 Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 611,  
 pl. 72, figs. 9, 10.
328. **Gryphæa vesicularis** Lamarck? Plesiotypes.  
 Fort Pierre (Cret.). Cheyenne River, near Black Hills,  
 South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 20, pl. 11,  
 figs. 2a-c; pl. 16, figs. 8a, 8b.
2340. **Gryphæa vesicularis** Lamarck. Plesiotypes.  
 Cretaceous. Near Freehold, New Jersey.  
 White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 303, pl. 48,  
 figs. 1-5.
28775. **Gryphæa wardi** Hill and Vaughan. Cotypes.  
 Glen Rose (Lower Cret.). Between Bee Creek and Peder-  
 nalis River, Travis County, Texas.  
 Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 49,  
 pl. 1, figs. 1-16.
- 28782 **Gryphæa washitaensis** Hill. Plesiotypes.  
 to Washita (Lower Cret.). Near Denison and Austin,  
 28785. Texas.  
 Hill and Vaughan, Bull. No. 151, U. S. Geol. Surv., 1898, p. 59,  
 pl. 19, figs. 3-5, 7-9, 11-18; pl. 20, figs. 1, 2, 4; pl. 23, figs. 1-3.
12512. **Gymnotoceras blakei** (Gabb.). Plesiotypes.  
 Triassic. Cottonwood Canyon, West Humboldt Range,  
 Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 113,  
 pl. 10, figs. 10a, b; pl. 11, fig. 6a.
12526. **Gymnotoceras rotelliforme** Meek. Cotypes.  
 Triassic. Buena Vista Canyon, West Humboldt Range,  
 Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 111,  
 pl. 10, figs. 9, 9a.
- Gypidula comis** (Owen). See *Pentamerus* (n. s.?) Owen.
5896. **Gyroceras logani** Meek. Holotype.  
 Base of Devonian. Forty miles below Fort Good Hope,  
 Mackenzie River, Canada.  
 Meek, Trans. Chicago Acad. Sci., I, 1868, p. 110, pl. 15, figs. 2a-c.
12459. **Gyrodes conradi** Meek. Holotype and plesiotype.  
 22910. Fort Benton? or Colorado (Cret.). Cheyenne River, South  
 Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 310, text figs.  
 33-36.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 136,  
 pl. 29, figs. 7, 8.



7856. **Gyrodès depressa** Meek. Cotypes.  
Colorado (Cret.). Chalk Creek, above Coalville, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 159,  
pl. 15, fig. 1a.
22912. **Gyrodès depressa** Meek. Plesiotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 135, pl. 29, figs.  
11-14.
20126. **Gyrodès dowelli** White. Holotype.  
Chico (Cret.). Jacksonville, Oregon.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 19, pl. 3, figs. 8, 9.
114430. **Gyrodès (Gyrodisca) duplinensis** Dall. Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 45.  
= *Macromphalia (Gyrodisca) duplinensis*.  
See *Gyrodisca duplinensis*.
114430. **Gyrodisca duplinensis** (Dall). Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 922,  
pl. 27, fig. 27.  
= *Macromphalia (Gyrodisca) duplinensis*.  
See *Gyrodès (Gyrodisca) duplinensis*.
45823. **Gyronema duplicatum** Ulrich and Scofield. Cotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1055, pl. 78, fig. 22.
45824. **Gyronema liratum** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1056, pl. 78, figs. 14-16.
45825. **Gyronema pulchellum** Ulrich and Scofield. Cotypes.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1054, pl. 78, figs. 19-21.
45826. **Gyronema semicarinatum** (Salter). Plesiotypes.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1055, pl. 78, figs. 17, 18.
9316. **Hadrophyllum glans** White. Plesiotype.  
Upper Burlington (Miss.). Burlington, Iowa.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 156, pl. 39, figs. 5a, 5b.



35224. **Haguia sphærica** Walcott. Cotypes.  
Flathead (Cambrian). Soda Butte Creek, Yellowstone  
National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 442,  
pl. 63, figs. 6, 6a.
158303. **Haimesiastræa conferta** Vaughan. Holotype and paratypes.  
158304. Chickasawan (Eocene). Bells Landing, Wilcox County,  
158311. and Woods Bluff, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 145, pl. 15,  
figs. 6-9; pl. 16.
35060. **Hallicystis imago** (Hall). Plesiotype.  
Niagaran (Sil.). Chicago, Illinois.  
Schuchert, Smithsonian Misc. Coll. Quart., XLVII, 1904, p. 216,  
text fig. 24.
41361. **Halliella labiosa** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 656, pl. 46, figs. 43-46.
41363. **Halliella retifera** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 185,  
pl. 15, figs. 5a-e.
12518. **Halobia (Daonella) lommeli** (Wissman). Plesiotypes.  
Triassic. Desatoya Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 100.
280. **Haminea minor** (Meek and Hayden). Plesiotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 273, pl. 31,  
figs. 1a, 1b.  
See *Bulla minor*.
278. **Haminea occidentalis** (Meek and Hayden). Holotype and  
paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 271, pl. 18,  
figs. 11a, 11b, 12a, 12b.  
See *Bulla occidentalis*.
- 113895 **Haminea pompholyx** Dall. Cotypes.  
to Chipola (Oligocene). Calhoun County, Florida.  
113897. Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 32; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 16.



279. **Haminea subcylindrica** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Near mouth of Milk River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 272, pl. 18, figs.  
10a, 10b.  
See *Bulla subcylindrica*.
12255. **Haminea subcylindrica** (Meek and Hayden). Plesiotypes.  
Fort Pierre (Cret.). Old Woman Fork of Cheyenne River,  
Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 437, pl. 12, fig. 24.
22932. **Haminea truncata** Stanton. Cotypes.  
Colorado (Cret.). Poison Canyon, Huerfano Park, Colo-  
rado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 162, pl. 34,  
figs. 9-11.
21730. **Hamites elatior** Forbes? Plesiotypes.  
Lower Cretaceous. Islands of St. Paul and St. Peter,  
Straits of Magellan, South America.  
White, Proc. U. S. Nat. Mus., XIII, 1890, p. 13, pl. 2, figs. 1, 2.
9869. **Hamites larvatus** Conrad. Plesiotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 165, pl. 21, fig. 8.
39941. **Haplocrinites hemisphæricus** Troost. Chiotype.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
38097. **Haplophlebium longipennis** Scudder. Cotypes.  
Upper Coal Measures. Near Pittston, Pennsylvania.  
Scudder, Proc. Amer. Acad. Arts and Sci., XX, 1885, p. 172.
41889. **Harpina minnesotensis** Clarke. Holotype.  
Trenton (Ord.). Hader, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 755, fig. 76.
41887. **Harpina ottawensis** (Billings)? Plastotype.  
Trenton (Ord.). Big Springs, near Fountain, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 757, fig. 79.
41888. **Harpina rutrellum** Clarke. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 758, figs. 80, 81.
35402. **Hebertella borealis** (Billings). Plesiotypes.  
Trenton (Ord.). Frankfort, Kentucky.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 36, 37.



35398. **Hebertella sinuata** (Hall). Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, fig. 17.
97492. **Heilprinia burnsii** (Dall). Holotype.  
Miocene. Petersburg, Virginia.  
Grabau, Smithsonian Misc. Coll., XLIV, 1904, p. 92.  
See *Fusus* (*Fusus*) *burnsii*.
113220. **Heilprinia caloosaënsis** (Heilprin). Plesiotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Grabau, Smithsonian Misc. Coll., XLIV, 1904, p. 87.  
See *Fusus caloosaënsis*.
112349. **Heilprinia caloosaënsis carolinensis** (Dall). Holotype.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Grabau, Smithsonian Misc. Coll., XLIV, 1904, p. 89.  
See *Fusus caloosaënsis carolinensis*.
112381. **Heilprinia equalis** (Emmons). Plesiotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Grabau, Smithsonian Misc. Coll., XLIV, 1904, p. 89.  
See *Fusus* (*Fusus*) *equalis*.
247. **Helcion alveolus** Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 68.  
= *Anisomyon alveolus*.
248. **Helcion carinatus** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
Pierre, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 68.  
= *Anisomyon borealis*.
23064. **Helcion granulatus** Stanton. Holotype and paratype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 63,  
pl. 12, fig. 4.
246. **Helcion patelliformis** Meek and Hayden. Holotype and  
paratypes.  
Montana (Cret.). Yellowstone River, near Miles City  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 68.  
= *Anisomyon patelliformis*.



249. **Helcion sexsulcatus** Meek and Hayden. Holotype  
Montana (Cret.). Yellowstone River, near Miles City.  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 1.  
= *Anisomyon sexsulcatus*.
244. **Helcion subovatus** Meek and Hayden. Holotype  
Montana (Cret.). Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 1.  
= *Anisomyon subovatus*.
45827. **Helcionopsis striata** Ulrich. Holotype  
Richmond (Ord.). Marion County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1897, p. 827, pl. 61, figs. 29, 30.
45828. **Helcionopsis subcarinata** Ulrich and Scofield. Cotype  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 827, pl. 61, fig. 28.
18324. **Helenia bella** Walcott. Cotype  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 39; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 616, pl. 78, figs. 4-4b.
111939. **Helicina ballista** Dall. Cotype  
111941. Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 1, pl. 1, figs. 2, 2a.
111943. **Helicina ballista tampæ** Dall. Cotype  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 1, pl. 1, figs. 2, 2a.
474. **Helicoceras angulatum** Meek and Hayden. Holotype  
Fort Pierre (Cret.). Head of south branch of Cheyenne River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 1.  
= *Heteroceras* ? *angulatum*.
22934. **Helicoceras** ? **corrugatum** Stanton. Holotype  
Colorado (Cret.). Turkey Creek, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 165, pl. 35, fig. 1.
473. **Helicoceras mortoni tenuicostatum** Meek. Cotype  
Fort Pierre (Cret.). Great Bend of the Missouri, below Fort Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 487, pl. 22, figs. 3a-c.  
See *Helicoceras tenuicostatus*.



8638. **Helicoceras pariense** White. Cotypes and plesiotypes.  
 22933. Colorado (Cret.). Southeast of Paria, and Upper Kanab,  
 Utah.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
 1876, p. 203, pl. 19, figs. 2a-d.—Stanton, Bull. No. 106, U. S.  
 Geol. Surv., 1893, p. 164, pl. 35, figs. 2-4.
12307. **Helicoceras stevensoni** Whitfield. Holotype.  
 Fort Pierre (Cret.). West side Beaver Creek, Black Hills,  
 South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 447, pl. 14, figs. 5-8.
473. **Helicoceras tenuicostatus** Meek and Hayden. Holotype.  
 Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
 Pierre, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 56.  
 = *Helicoceras mortoni tenuicostatum*.
471. **Helicoceras ? tortus** Meek and Hayden. Holotype.  
 Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
 Pierre, South Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 54.  
 = *Heteroceras tortum*.
43417. **Helicopora archimediformis** Claypole. Holotype.  
 Chester (Miss.). Litchfield, Kentucky.  
 Claypole, Quart. Jour. Geol. Soc. London, XXXIX, 1883, p. 34,  
 pl. 4, figs. 3, 4.  
 = *Archimedes laxus*.
43479. **Helicopora ulrichi** Claypole. Holotype.  
 Onondaga (Dev.). Falls of the Ohio.  
 Claypole, Quart. Jour. Geol. Soc. London, XXXIX, 1883, p. 33,  
 pl. 4, fig. 2.
46057. **Helicotoma declivis** Ulrich. Cotypes.  
 Stones River (Ord.). Murfreesboro, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1897, p. 1036, pl. 74, figs. 34-38.
45829. **Helicotoma granosa** Ulrich. Holotype.  
 Stones River (Ord.). High Bridge, Kentucky.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1897, p. 1035, pl. 82, figs. 32-34.
45830. **Helicotoma marginata** Ulrich. Holotype.  
 Richmond (Ord.). Richmond, Indiana.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
 1897, p. 1036, pl. 74, fig. 39.



45831. **Helicotoma planulata** Salter. Plesiotypes.  
Black River (Ord.). Paquette Rapids, Ottawa River,  
Canada.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1033, pl. 74, figs. 16, 17.
45832. **Helicotoma planulata robusta** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Jo Daviess County, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1033, pl. 74, fig. 15.
45833. **Helicotoma planulatoides** Ulrich. Holotype.  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1034, pl. 74, figs. 28-30.
46058. **Helicotoma subquadrata** Ulrich. Cotypes.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1033, pl. 74, figs. 31-33.
46059. **Helicotoma tennesseensis** Ulrich. Cotypes.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1034, pl. 74, figs. 20-24.
45834. **Helicotoma umbilicata** Ulrich and Scofield. Cotypes.  
45835. Stones River (Ord.). Dixon and La Salle, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1034, pl. 62, fig. 68; pl. 74, figs.  
25-27.
45836. **Helicotoma verticalis** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1035, pl. 62, fig. 69; pl. 74, figs. 18, 19.
43668. **Heliotrypa bifolia** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 278, pl. 13,  
figs. 6-6c.
111959. **Helix (Dædalochila) adamnis** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 12,  
pl. 1, figs. 5, 5a.
20073. **Helix adipis** White. Cotypes.  
Eocene. Nacimiento, New Mexico.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 27, pl. 5, figs.  
11, 12.



111946. **Helix (Jeanneretia) crusta** Dall. Cotypes.  
 111947. Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 9, pl. 1, figs. 4, 4a, 4b, 6e, 6f.
111950. **Helix (Jeanneretia) crusta cunctator** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 10.
13401. **Helix (Monodon?) dallii** (Stearns ms.) White. Holotype and paratypes.  
 John Day (Miocene). Eastern Oregon.  
 White, Bull. No. 18, U. S. Geol. Surv., 1885, p. 14, pl. 3, figs. 4-6.
111951. **Helix (Jeanneretia) diespiter** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 10, pl. 1, figs. 1, 1a.
111955. **Helix (Jeanneretia) direpta** Dall. Cotypes.  
 130354. Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 10, pl. 1, figs. 7a, 7b; Pt. V, 1900, pl. 39, figs. 4, 5.
12502. **Helix evanstonensis** White. Cotypes.  
 Laramie (Cret.). Evanston, Wyoming.  
 White, Bull. U. S. Geol. and Geogr. Surv. Terr., IV, 1878, p. 714;  
 Third Ann. Rept. U. S. Geol. Surv., 1883, p. 454, pl. 27,  
 figs. 29-31.
13400. **Helix (Aglaia) fidelis** Gray. Plesiotypes.  
 John Day (Miocene). Eastern Oregon.  
 White, Bull. No. 18, U. S. Geol. Surv., 1885, p. 14, pl. 3, figs. 1-3.
111957. **Helix (Jeanneretia) haruspica** Dall. Holotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 11, pl. 1, figs. 7c, 7d.
111945. **Helix (Jeanneretia) instrumosa** Dall. Cotypes.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 9, pl. 1, figs. 7, 8b.
8883. **Helix kanabensis** White. Cotypes.  
 Laramie (Cret.). Upper Kanab, Utah.  
 White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 120; Third  
 Ann. Rept. U. S. Geol. Surv., 1883, p. 454, pl. 25, figs. 12-14.
111944. **Helix (Jeanneretia) latebrosa** Dall. Holotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 8,  
 pl. 1, figs. 8, 8a.



2102. *Helix leidy* Hall and Meek. Holotype.  
White River (Miocene). Bad Lands of White River,  
South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 604, pl. 45,  
figs. 7a, 7b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 455, pl. 32, figs. 32, 33.
8590. *Helix leidy* Hall and Meek. Plesiotype.  
Miocene. Mooseneck Peak and Pownsagunt Plateau, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 211, pl. 21, figs. 3a-3c.
20072. *Helix nacimientensis* White. Cotypes.  
Eocene. Nacimiento, New Mexico.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 26, pl. 5, figs.  
3-7.
2106. *Helix occidentalis* Meek and Hayden. Cotypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 135.  
= *Hyalina* ? *occidentalis*.
8882. *Helix peripheria* White. Cotypes.  
Bitter Creek (Eocene). Pine Valley Mountains, Utah.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 130;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 445, pl. 29, figs.  
11, 12.
13402. *Helix (Patula) perspectiva* Say. Plesiotypes.  
John Day (Miocene). Eastern Oregon.  
White, Bull. No. 18, U. S. Geol. Surv., 1885, p. 14, pl. 3, fig. 7.
8881. *Helix riparia* White. Cotypes.  
Green River (Eocene). Eighty miles below Green River  
City, Wyoming.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 130; Third  
Ann. Rept. U. S. Geol. Surv., 1883, p. 455, pl. 29, figs. 13, 14.
8908. *Helix (Patula) sepulta* White. Cotypes.  
Laramie (Cret.). Evanston, Wyoming.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 160.
1974. *Helix spatiosa* Meek and Hayden. Holotype.  
Wind River (Eocene). Wind River Valley, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 446.  
= *Macrocyclus spatiosa*.
1975. *Helix* ? *veterna* Meek and Hayden. Holotype and paratype.  
Eocene. Wind River Valley, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 447.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 596, pl. 42,  
figs. 8a, 8b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 454, pl. 30, figs. 4, 5.



2104. **Helix vetusta** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 552, pl. 42, figs.  
7a, 7b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p.  
454, pl. 27, fig. 28.  
See *Helix vitrinoides*.
2104. **Helix vitrinoides** Meek and Hayden. Cotypes.  
Laramie (Cret.). Mouth of Judith River.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 135.  
= *Helix vetusta*.
18359. **Helminthoidichnites marinus** (Emmons)? Plesiotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 35; Tenth Ann.  
Rept. U. S. Geol. Surv., 1890, p. 603, pl. 62, figs. 1-4.
18359. **Helminthoidichnites marinus** (Emmons). Plesiotypes.  
26275. Lower Cambrian. Washington County, New York.  
26277. Walcott, Mon. XXX, U. S. Geol. Surv., 1898, pl. 27, figs. 2, 4, 5.  
26279.
33793. **Helminthoidichnites meeki** Walcott. Holotype.  
Greyson (Algonkian). Deep Creek Canyon, near Glen-  
mont, Montana.  
Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 236, pl. 24, fig. 7.
33795. **Helminthoidichnites ? neihartensis** Walcott. Cotypes.  
Greyson (Algonkian). Glenwood and Neihart, Montana.  
Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 236, pl. 24, figs. 1, 2, 4.
33794. **Helminthoidichnites ? spiralis** Walcott. Cotypes.  
Greyson (Algonkian). Deep Creek Canyon, near Glen-  
mont, Montana.  
Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 236, pl. 24, figs. 5, 6.
43566. **Helopora alternata** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 192, fig.  
16f; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 192, pl. 3, fig. 9.
43568. **Helopora divaricata** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 191, pl. 3, figs. 1-3.
43566. **Helopora elegans** Ulrich. Holotype.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 194, fig. 11.



43369. **Helopora fragilis** Hall. Plesiotypes and figured sections.  
Clinton Sil. . Hamilton, Ontario, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 643, figs. 18, a-e.
43569. **Helopora harrisi** James. Plesiotypes.  
Richmond Ord. . Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 195, pl. 3, figs. 11, 11b, 11c, 12.
43370. **Helopora lindströmi** Ulrich. Cotypes and figured section.  
Silurian. Island of Gotland, Sweden.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 643, figs. 18, f, g, h.
43677. **Helopora mucronata** Ulrich. Holotype.  
Trenton Ord. . Cannon Falls, Minnesota.  
Ulrich, Jour. Cincinnati Soc. Nat. Hist., XII, 1890, p. 192, fig. 16e;  
Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893,  
p. 193, pl. 3, fig. 10.
43567. **Helopora quadrata** Ulrich. Cotypes.  
Trenton Ord. . Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 193, fig. 10.
38137. **Hemeristia occidentalis** Dana? Plesiotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 342, pl. 31,  
fig. 8; Foss. Insects N. America, I, 1890, p. 306, pl. 17, fig. 8.
12241. **Hemiaster calvini** Clark. Holotype.  
Shoal Creek Lower Cret. . Travis County, Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 90, pl. 49, figs. 2a-i.
19114. **Hemiaster dalli** Clark. Holotype.  
Washita Lower Cret. . Bexar County, Texas.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, p. 77; Bull. No. 97,  
U. S. Geol. Surv., 1893, p. 89, pl. 48, figs. 2a-2e.
331. **Hemiaster humphreysanus** Meek and Hayden. Holotype and paratype.  
Fort Pierre Upper Cret. . One hundred and fifty miles  
from mouth of Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 147.—  
Meek, Rept. U. S. Geol. Surv. Terr., ix, 1876, p. 5, pl. 10,  
figs. 1a-g.—Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 88,  
pl. 48, figs. 1a-f.
2208. **Hemiaster stella** Morton. Plesiotype.  
Upper Cretaceous. Timber Creek, New Jersey.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 84, pl. 40, figs.  
1a-d.



30187. **Hemicidaris intumescens** Clark. Cotype.  
 30188. Jurassic. Taylorsville, California.  
 Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 44, pl. 12, figs. 1b, 1d, 1e?, 1h, 1i.
4953. **Hemicrapturus rasoumowskii** Green. Plastotype.  
 Ordovician? Tzarsko Selo, Russia.  
 Green, Mon. Trilobites N. America, Phila., 1832, p. 20. Cast No. 42.
43564. **Hemiphragma irrasum** Ulrich. Cotypes and figured sections.  
 43565. Stones River (Ord.). Minneapolis, Minnesota.  
 Trenton (Ord.). Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 299, pl. 24, figs. 5-19.
43563. **Hemiphragma tenuimurale** Ulrich. Cotypes and figured sections.  
 Trenton (Ord.). Near Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 301, pl. 24, figs. 20-23.
636. **Hemipronites chemungensis arctostriata** (Conrad). Plesiotypes.  
 Upper Devonian. West side Buell Valley, east of Eureka District, Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 35, pl. 3, fig. 2.  
 =Schuchertella arctostriata.
1010. **Hemipronites crassus** (Meek and Hayden). Cotypes.  
 Coal Measures. Leavenworth, Kansas.  
 Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 26, pl. 1, figs. 7a, 7b.  
 =Orthotetes crassus.  
 See Orthisina crassa.
6529. **Hemipronites crassus** (Meek and Hayden). Cotypes.  
 7013. Upper Carboniferous. Nebraska City, Nebraska.  
 24531. Meek, Final Rept. U. S. Geol. Surv. Neb., 1872, p. 174, pl. 5, figs. 10a-c; pl. 8, fig. 1.—White, Thirteenth Ann. Rept. Geol. Surv. Ind., 1884, p. 129, pl. 26, figs. 4-11.  
 =Orthotetes crassus.
8475. **Hemipronites crenistria** (Phillips). Plesiotype.  
 Upper Carboniferous. Locality unknown.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 187  
 p. 124, pl. 10, fig. 9a.  
 =Orthotetes crassus?



684. **Hemipronites crenistria** (Phillips). Plesiotypes.  
Upper Carboniferous. Near Camp Floyd, west of Utah  
Lake, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 62,  
pl. 7, fig. 2.  
= *Orthotetes robustus*.
43764. **Hemitrypa aspera** Ulrich. Cotypes.  
43765. Keokuk (Miss.). Nauvoo, Illinois, and Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 563, pl. 57, figs. 4c-4f.
44087. **Hemitrypa nodosa** Ulrich. Holotype.  
Keokuk (Miss.). Bentonsport, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 562, pl. 57, fig. 3.
43374. **Hemitrypa pateriformis** Ulrich. Cotype.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 564, pl. 57, figs. 7-7c.
43766. **Hemitrypa perstriata** Ulrich. Cotype and figured sections.  
Keokuk (Miss.). Bentonsport, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 564, pl. 57, figs. 6, 6a.
43371. **Hemitrypa proutana** Ulrich. Plesiotypes and figured  
sections.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 560, pl. 57, figs. 1-1c.
43372. **Hemitrypa proutana nodulosa** Ulrich. Cotypes.  
43373. Keokuk (Miss.). Nauvoo, Illinois, and Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 562, pl. 57, figs. 2-2c.
43375. **Hemitrypa tenera** Ulrich. Cotypes and figured sections.  
Middle Devonian. Davenport, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 559, pl. 44, figs. 7-7a; pl.  
54, figs. 10-10c.
474. **Heteroceras ? angulatum** (Meek and Hayden). Holotype.  
Fort Pierre Cret. . Head of south branch of Cheyenne  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 484, pl. 21,  
figs. 3a-c.  
See *Helicoceras angulatum*.
470. **Heteroceras ? cheyennense** (Meek and Hayden). Holotype.  
Fort Pierre Cret. . Mouth of Big Cheyenne River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 483, pl. 21, figs.  
2a, 2b.  
See *Ancylloceras ? cheyennensis*.



1350. **Heteroceras cooperi** (Gabb). Plesiotype.  
Nanaimo (Cret.). Komooks, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 367,  
pl. 3, figs. 7, a.
469. **Heteroceras ? nebrascense** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Near forks of Cheyenne River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 480, pl. 22,  
figs. 1a-c.  
See *Ancyloceras ? nebrascensis*.
12292. **Heteroceras ? nebrascense** (Meek and Hayden). Plesiotype.  
Montana (Cret.). East fork of Beaver Creek, Black Hills,  
South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 451, pl. 14, fig. 9, pl. 15, fig. 6.
12288. **Heteroceras newtoni** Whitfield. Holotype.  
Fort Pierre (Cret.). West side of Beaver Creek, Black  
Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880  
p. 449, pl. 15, figs. 1-4.
471. **Heteroceras tortum** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Great Bend of the Missouri, below  
Fort Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 481, pl. 22,  
figs. 4a-c.  
See *Helicoceras ? tortus*.
472. **Heteroceras ? umbilicatum** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Great Bend of the Missouri, below  
Fort Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 482, pl. 22, fig. 5.  
See *Turrilites umbilicatus*.
42219. **Heterocrinus geniculatus** Ulrich. Natural mould of cotype.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist. II 1879, p. 16, pl. 7,  
fig. 13.  
= *Ohioocrinus geniculatus*.
42304. **Heterocrinus (Iocrinus) æhanus** Ulrich. Cotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 175, pl. 5,  
fig. 9.  
= *Ohioocrinus æhanus*.
43133. **Heteronema capillare** Ulrich and Bassler. Holotyp  
Silurian. Island of Gotland.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 190  
p. 278, pl. 65, fig. 11.



43134. **Heteronema carbonarium** Ulrich and Bassler. Holotype.  
Lower Coal Measures. Seville, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, p. 279,  
pl. 65, fig. 13.
43132. **Heteronema ? contextum** Ulrich and Bassler. Holotype.  
Lorraine (Ord.). Morrow, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904,  
p. 279, pl. 65, fig. 12.
43672. **Heteropora attenuata** Ulrich. Cotypes and figured sections.  
Upper Cretaceous. Pulaski County, Arkansas.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 144, pl. 6,  
fig. 12.
43673. **Heteropora consimilis** Ulrich. Cotypes.  
Upper Cretaceous. Pulaski County, Arkansas.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 143, pl. 6,  
fig. 11.
46557. **Heterospongia knotti** Ulrich. Holotype.  
Richmond (Ord.). Near Lebanon, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 241, fig. 5 on p. 236.
46558. **Heterospongia subramosa** Ulrich. Cotypes.  
46559. Lorraine (Ord.). Cincinnati, Ohio.  
46560. Richmond (Ord.). Near Lebanon, Kentucky, and Spring  
Valley, Minnesota.  
Ulrich, Amer. Geol., III, 1889, p. 240, fig. 6 on p. 236.—Winchell  
and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. I, 1893, p. 79, pl. G, figs. 4-6.
157831. **Heteroterma gabbi** Stanton. Holotype.  
Lower Tejon (Eocene). Near Lower Lake, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1046, pl. 67, fig. 3.
35113. **Heterotrypa frondosa** (d'Orbigny). Fragment and figured  
sections of Edwards and Haime's plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII,  
1904, p. 25, pl. 11, figs. 1-3.
43367. **Heterotrypa inflecta** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 414, pl. 37, figs. 2-2d.
43186. **Heterotrypa parvulipora** Ulrich and Bassler. Cotypes and  
figured sections.  
Trenton (Ord.). Maury County, Tennessee.  
Bassler, Smithsonian Misc. Coll., Quart., XLVII,  
4, pl. 11, figs. 4-6.



43368. **Heterotrypa prolifica** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 413, pl. 37, figs. 1-1d.  
= *Heterotrypa subramosa prolifica*.
43750. **Heterotrypa singularis** Ulrich. Figured sections of cotypes.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 415, pl. 37, figs. 3c, 3d, 3e.  
= *Dekayella singularis*.
43664. **Heterotrypa solitaria** Ulrich. Holotype and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 88, pl. 1,  
figs. 3-3b.
43689. **Heterotrypa vaupeli** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 85, pl. 1,  
figs. 2-2b.  
= *Nicholsonella vaupeli*.
186. **Hettangia americana** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 274.  
= *Tancredia americana*.
46561. **Hindia inæqualis** Ulrich and Everett. Figured sections of  
holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 275, pl. 2,  
figs. 4-4b.
46562. **Hindia parva** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Fountain, Minnesota.  
Ulrich, Amer. Geol., III, 1889, p. 244.—Winchell and Schuchert,  
Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 79, pl. G, figs. 7-9.
115111. **Hindsiella acuta** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1138, pl. 45, fig. 9.
115091. **Hindsiella carolinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1138, pl. 45, fig. 4.
155757. **Hindsiella (faba var.?) donacia** Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V,  
p. 1136, pl. 45, fig. 12.



114614. *Hindsia nephritica* Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1137, pl. 45, fig. 8.
13336. *Hinnites crassa* Conrad. Cotypes.  
Miocene. Santa Margarita, Salinas Valley, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 190, pl. 2, figs. 1, 2.
107147. *Hipponyx tortilis* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 322, pl. 27, fig. 15.
8382. *Holaster simplex* Shumard. Plesiotype.  
Washita (Lower Cret.). Bexar County, Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 76, pl. 38, figs. 1a-g;  
pl. 39, figs. 1a-d.
35200. *Holasterella wrighti americana* Girty. Cotype.  
Madison (Miss.). Gallatin Range, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 508, pl. 71,  
fig. 11a.
12236. *Holactypus planatus* Roemer. Plesiotype.  
Washita (Lower Cret.). Cow Creek, Travis County,  
Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 58, pl. 23, figs. 2a-f.
45837. *Holopea ampla* Ulrich and Scofield. Cotype.  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1065, pl. 79, fig. 22.
45838. *Holopea appressa* Ulrich and Scofield. Cotype.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1065, pl. 79, figs. 7-9.
28190. *Holopea arctica* Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 168, pl. 12,  
figs. 14-16.
46531. *Holopea concinnula* Ulrich and Scofield. Plastotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1066, pl. 79, fig. 6.
45839. *Holopea excelsa* Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1067, pl. 79, figs. 11, 12.



24339. **Holopea furmaniana** Hartt and Rathbun. Cotypes.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. New York, XI,  
1875, p. 115.  
= *Diaphorostoma furmaniana*.
45840. **Holopea insignis** Ulrich and Scofield. Cotypes.  
45841. Stones River (Ord.). Minneapolis and Cannon Falls,  
Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1065, pl. 79, figs. 1-5.
45842. **Holopea nashvillensis** Ulrich. Holotype.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1068.
45843. **Holopea oxfordensis** Ulrich. Cotypes.  
45844. Richmond (Ord.). Richmond, Indiana; Oxford, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1068.
45845. **Holopea parvula** Ulrich. Holotype.  
Trenton (Ord.). One mile south of Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1067, pl. 79, fig. 19.
45846. **Holopea pyrene** Billings. Plesiotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1067, pl. 79, figs. 13-18.
45847. **Holopea rotunda** Ulrich and Scofield. Cotypes.  
45848. Stones River (Ord.). Dixon, Illinois.  
Trenton (Ord.). Hartsville, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1066, pl. 79, figs. 20, 21.
45849. **Holopea supraplana** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Kenyon, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1068, pl. 79, figs. 27, 28.
23877. **Homalonotus (Calymene) acanthurus** Clarke. Plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 11, pl. 1,  
figs. 9, 10.
23879. **Homalonotus derbyi** Clarke. Cotypes and plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 7, pl. 1, fig. 4
23878. **Homalonotus oiara** Hartt and Rathbun. Plastoty  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 5, pl. 1, fig.



28942. **Homomya gallatinensis** Stanton. Holotype and paratypes.  
Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 625,  
pl. 74, figs. 6, 7.
43304. **Homotrypa arbuscula** Ulrich. Cotypes and figured sections.  
43305. Stones River (Ord.). Dixon, Illinois; High Bridge, Ken-  
tucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 409, pl. 33, figs. 3, 3c.
41762. **Homotrypa austini** Bassler. Cotypes and figured sections.  
Richmond (Ord.). Dutch Creek, four and one-half miles  
west of Wilmington, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 584, pl. 24,  
figs. 5-9.
43578. **Homotrypa callosa** Ulrich. Cotypes and figured sections.  
43579. Trenton (Ord.). Near Burgin, Kentucky, and Cannon  
Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 243, pl. 20, figs. 15-21.
41744. **Homotrypa cincinnatiensis** Bassler. Cotypes and figured  
sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 576, pl. 21,  
figs. 4-10.
41755. **Homotrypa communis** Bassler. Cotypes and figured  
sections.  
Richmond (Ord.). Oregonia, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 581, pl. 23,  
figs. 1-4.
41729. **Homotrypa curvata** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 242, pl. 10,  
figs. 7, 7d.
41735. **Homotrypa curvata præcipita** Bassler. Holotype.  
Utica (Ord.). West Covington, Kentucky.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 575, pl. 23, fig. 15.
41758. **Homotrypa cylindrica** Bassler. Cotypes and figured  
sections.  
Richmond (Ord.). Richmond, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 585, pl. 22,  
figs. 8-13.
41749. **Homotrypa dawsoni** (Nicholson). Plesiotypes and figured  
sections.  
Richmond (Ord.). Waynesville, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 581, pl. 25,  
figs. 9-10.



41741. **Homotrypa dumosa** Bassler. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 576, pl. 20, fig. 1;  
pl. 21, figs. 1-3.
43574. **Homotrypa exilis** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 236, pl. 19, figs. 10-16.
43767. **Homotrypa flabellaris** Ulrich. Figured sections of cotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 411, pl. 32, figs. 3b, 3c.
41778. **Homotrypa flabellaris spinifera** Bassler. Holotype and  
figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 580, pl. 21, figs.  
11-15.
43768. **Homotrypa gelasinosa** Ulrich. Figured sections of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 410, pl. 32, figs. 2b, 2c.
41764. **Homotrypa grandis** Bassler. Cotypes and figured sections.  
Lorraine (Ord.). Two miles west of Goodlettsville, Ten-  
nessee.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 578, pl. 20, figs.  
7-10.
43998. **Homotrypa insignis** Ulrich. Cotype.  
Trenton (Ord.). St. Paul, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1886, p. 82.  
= *Homotrypa subramosa insignis*.
43577. **Homotrypa (?) intercalaris** Ulrich. Cotypes and figured  
sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 238, fig. 13.
34329. **Homotrypa libana** Bassler. Holotype and figured sections.  
Lorraine (Ord.). Lebanon, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 578, pl. 22, figs.  
1-3.
43571. **Homotrypa minnesotensis** Ulrich. Cotypes and figured  
sections.  
43572. :  
Stones River (Ord.). Minneapolis, Minnesota.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1893, p. 235, pl. 19, figs. 1-9.



43573. *Homotrypa minnesotensis montifera* Ulrich. Holotype and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 235, pl. 19, fig. 3a.
34328. *Homotrypa nicklesi* Bassler. Cotypes and figured sections.  
Richmond (Ord.). Raywick, Kentucky.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 586, pl. 22, figs. 4-7.
41771. *Homotrypa nitida* Bassler. Cotypes and figured sections.  
Richmond (Ord.). Near Osgood, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 586, pl. 20, fig. 15; pl. 25, figs. 5-8.
41753. *Homotrypa nodulosa* Bassler. Cotypes and figured sections.  
Richmond (Ord.). Hanover, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 582, pl. 23, figs. 5-11; pl. 25, fig. 15.
43671. *Homotrypa obliqua* Ulrich. Holotype and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 243, pl. 10, figs. 6, 6b.
41736. *Homotrypa obliqua* Ulrich. Plesiotypes and figured sections.  
41737. Lorraine (Ord.) Cincinnati, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 575, pl. 23, figs. 12-14.
41747. *Homotrypa pulchra* Bassler. Cotypes and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 577, pl. 20, figs. 11-14.
41760. *Homotrypa ramulosa* Bassler. Cotypes and figured sections.  
Richmond (Ord.). Versailles, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 585, pl. 25, figs. 1-4.
41784. *Homotrypa richmondensis* Bassler. Cotypes and figured sections.  
Richmond (Ord.). Richmond, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 582, pl. 24, figs. 1-4.
43576. *Homotrypa separata* Ulrich. Holotype and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 237, pl. 19, figs. 17-20.



43575. **Homotrypa (?) similis** Foord. Plesiotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 242, pl. 20, figs. 28-33.
41761. **Homotrypa splendens** Bassler. Cotypes and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 587, pl. 25, figs. 11-14.
43570. **Homotrypa subramosa** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 239, pl. 19, figs. 21-28.
43580. **Homotrypa tuberculata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 240, text fig. 14.
41766. **Homotrypa wortheni** (James). Plesiotypes and figured sections.  
Richmond (Ord.). Richmond, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 583, pl. 24, figs. 10-14.
41768. **Homotrypa wortheni intercellata** Bassler. Cotypes and figured sections.  
Richmond (Ord.). One-fourth mile east of Osgood, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 584, pl. 24, fig. 17.
41767. **Homotrypa wortheni prominens** Bassler. Cotypes.  
Richmond (Ord.). Elkhorn Creek, near Richmond, Indiana.  
Bassler, Proc. U. S. Nat. Mus., XXVI, 1903, p. 584, pl. 24, figs. 15-16.
43763. **Homotrypella contexta** Ulrich. Fragment and figured sections of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 412, pl. 32, figs. 5a, 5b.
43561. **Homotrypella instabilis** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., II I, 1893, p. 229, pl. 18, figs. 9-20.



43559. **Homotrypella multiporata** Ulrich.      Figured sections of  
holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 230, pl. 18, figs. 21, 22.
43560. **Homotrypella mundula** Ulrich.      Holotype and figured  
sections.  
Trenton (Ord.). Decorah, Iowa.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 232, fig. 12.
43178. **Homotrypella nodosa** Ulrich and Bassler.      Cotypes and  
figured sections.  
Lorraine (Ord.). Mount Parnassus, Columbia, Tennessee.  
Ulrich and Bassler in Hayes and Ulrich, U. S. Geol. Surv., Folio  
95, 1903, illustration sheet, figs. 14, 15.—Smithsonian Misc.  
Coll., Quart., XLVII, 1904, p. 21, pl. 7, figs. 1-3.
43562. **Homotrypella (?) ovata** Ulrich.      Cotypes and figured  
sections.  
Trenton (Ord.). Two miles south of Cannon Falls, Min-  
nesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1898, p. 231, pl. 18, figs. 23-30.
43557. **Homotrypella rustica** Ulrich.      Figured sections of holotype.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 234, pl. 18, figs. 31-33.
43558. **Homotrypella (?) subgracilis** Ulrich.      Cotypes and figured  
sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 230, pl. 26, figs. 10-16.
23093. **Hoplites angulatus** Stanton.      Holotype.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.  
Stanton, Bull. No. 138, U. S. Geol. Surv., 1895 (Feb., 1896), p.  
80, pl. 18, figs. 3, 4.
23094. **Hoplites crassiplicatus** Stanton.      Holotype.  
Knoxville (Lower Cret.). Three miles north of Paskenta,  
California.  
Stanton, Bull. No. 138, U. S. Geol. Surv., 1895 (Feb., 1896), p.  
81, pl. 18, fig. 8.
21573. **Hoplites dilleri** Stanton.      Holotype.  
Knoxville (Lower Cret.). Three miles west of Lowerys,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 82,  
pl. 18, figs. 6, 7.



23091. **Hoplites hyatti** Stanton. Holotype.  
Knoxville (Lower Cret.). West of Riddles, Oregon.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 79, pl. 16, fig. 2.
23092. **Hoplites storrsi** Stanton. Holotype.  
Knoxville (Lower Cret.). On south fork of Elder Creek,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 79, pl. 17, figs. 1, 2; pl. 18, fig. 5.
45850. **Hormotoma bellicincta** (Hall). Plesiotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1017, pl. 70, figs. 15-17.
45851. **Hormotoma gracilis** (Hall). Plesiotypes.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1014, pl. 70, figs. 20-22.
45852. **Hormotoma gracilis angustata** (Hall). Plesiotypes.  
to Utica (Ord.). Newport, Kentucky.
45856. Black River (Ord.). Near Cannon Falls, Minnesota;  
Central Tennessee.  
Stones River (Ord.). High Bridge, Kentucky; Beloit,  
Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1014, pl. 70, figs. 30-36.
45857. **Hormotoma gracilis goodhuensis** Ulrich and Scofield.  
Cotypes.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1015, pl. 70, figs. 42, 43.
45858. **Hormotoma gracilis multivolvis** Ulrich and Scofield.  
Cotypes.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1014, pl. 70, figs. 26-29.
45859. **Hormotoma gracilis sublaxa** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Lincoln County, Missouri.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1014, pl. 70, figs. 23-25.
45860. **Hormotoma ? major** (Hall). Plastotype.  
Trenton (Ord.). Pike County, Missouri.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1018, pl. 71, fig. 5.
45861. **Hormotoma salteri** Ulrich. Cotyp  
Trenton (Ord.). Two miles north of Danville, Kentucl  
Ulrich Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1897, p. 1016, pl. 70, figs. 44-48.



45862. *Hormotoma salteri nitida* Ulrich. Holotype.  
Trenton (Ord.). Two miles north of Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1016.
45863. *Hormotoma salteri tennesseensis* Ulrich. Cotypes.  
Black River (Ord.). Near Lebanon, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1016, pl. 70, figs. 49-51.
45864. *Hormotoma subangulata* Ulrich and Scofield. Cotypes.  
to Trenton (Ord.). Cannon Falls, Minnesota.  
45866. Black River (Ord.). Chatfield, and Goodhue County,  
Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1018, pl. 70, figs. 37-41.
45867. *Hormotoma trentonensis* Ulrich and Scofield. Holotype.  
Trenton (Ord.). Hader, Minnesota (Wykoff, Minnesota  
in error).  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1017, pl. 70, figs. 13, 14.
35317. *Hustedia mormoni* Maroon. Plesiotypes.  
Maroon (Upper Carb.). Southeast of Italian Peak, Elk  
Mountain, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 411, pl. 7,  
figs. 12, 12a, 13.
115623. *Hyalæa digitata* Guppy. Holotype.  
Miocene. Jamaica.  
Guppy, Proc. Sci. Assoc. Trinidad, 1882, p. 176, pl. 7, fig. 16.
115624. *Hyalæa Diacria vendryesiana* Guppy. Holotype.  
Miocene. Jamaica.  
Guppy, Geol. Mag., London, Dec. 11, 1, 1874, p. 405, pl. 17,  
fig. 21; Proc. Sci. Assoc. Trinidad, 1882, p. 175.
115625. *Hyalæa ventricosa* Guppy. Holotype.  
Miocene. Jamaica.  
Guppy, Proc. Sci. Assoc. Trinidad, 1882, p. 176, pl. 7, fig. 15.
2106. *Hyalina? occidentalis* Meek and Hayden. Cotypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1877, p. 327, pl. 42,  
figs. 24-31.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 452, pl. 27, fig. 27.  
See *Helix occidentalis*.
46563. *Hyalostelia solivaga* Ulrich. Holotype.  
Silurian. Spring Valley, Minnesota.  
Ulrich, Geol. Surv. Ill., VIII, 1880, p. 231, pl. 1, fig. 20.



113556. *Hydrobia amnicoloides* Pilsbry. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Pilsbry, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 336, pl. 21, fig. 5.
2149. *Hydrobia anthonyi* (Meek and Hayden). Holotype and  
paratypes.  
Laramie (Cret.). Thirty miles above mouth of Yellow-  
stone River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 571, pl. 43, figs.  
10a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p.  
465, pl. 27, fig. 39.  
See *Melania anthonyi*.
113562. *Hydrobia mobiliana* Dall. Cotypes.  
Miocene. Near Mobile, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
337.
23121. *Hydrobia occulta* White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 57, pl. 10, figs.  
12, 13.
12501. *Hydrobia recta* White. Cotypes.  
Laramie (Cret.). Near Evanston, Wyoming.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 132; Third  
Ann. Rept. U. S. Geol. Surv., 1883, p. 466, pl. 27, fig. 38;  
Bull. No. 34, U. S. Geol. Surv., 1886, p. 30, pl. 2, fig. 21.
113559. *Hydrobia umbilicata* Pilsbry. Cotypes.  
113560. Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Pilsbry, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 337, pl. 21, fig. 9a.
8870. *Hydrobia utahensis* White. Cotypes.  
12498. Bitter Creek (Eocene). Musinia Plateau, Utah.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 132; Third  
Ann. Rept. U. S. Geol. Surv., 1883, p. 446, pl. 27, fig. 35;  
Bull. No. 34, U. S. Geol. Surv., 1886, p. 30, pl. 2, fig. 20.
2147. *Hydrobia warrenana* (Meek and Hayden). Holotype.  
Laramie (Cret.). Square Butte, thirty miles below Fort  
Clarke, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 572, pl. 43,  
figs. 11a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 465, pl. 27, fig. 40.  
See *Melania warrenana*.
38120. *Hylobius lacoiei* Scudder. Holotype.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 92, pl. 10, fig. 15.



15381. **Hyolithellus micans** (Billings). Plesiotype.  
 15382. Lower Cambrian. Troy, and Schodack Landing, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 142, pl. 14, figs. 2-2e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 624, pl. 79, figs. 1-1e.
17444. **Hyolithellus micans rugosa** Walcott. Holotype.  
 Lower Cambrian. Washington County, New York.  
 Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 191, pl. 1, fig. 10; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 624, pl. 79, fig. 2.
15388. **Hyolithes americanus** Billings. Plesiotype.  
 Lower Cambrian. Troy, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 132, pl. 13, figs. 6-6f; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 620, pl. 75, figs. 2-2f.
23850. **Hyolithes attenuatus** Walcott. Holotype.  
 Upper Cambrian. Highland Range, Central Nevada.  
 Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 269, pl. 20, figs. 11, 11a.
8579. **Hyolithes billingsi** Walcott. Plesiotype.  
 14903. Lower Cambrian. L'Anse au Loup, Labrador; Pioche, Nevada.  
 15377. Lower Cambrian. L'Anse au Loup, Labrador; Pioche, Nevada.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 134, pl. 13, figs. 1-1d; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 620, pl. 75, figs. 1-1e.  
 See *Hyolithes primordialis*?
14426. **Hyolithes carbonaria** Walcott. Cotypes.  
 Lower Carboniferous. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 224, pl. 23, fig. 3.
14884. **Hyolithes communis** Billings. Plesiotype.  
 15387. Lower Cambrian. Bic Harbor, Quebec, Canada, and Troy, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 130, pl. 14, figs. 3-3e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 620, pl. 75, figs. 3-3e.
15386. **Hyolithes communis emmonsii** Ford. Plesiotype.  
 Lower Cambrian. Troy, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 137, pl. 14, figs. 4-4b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 621, pl. 77, figs. 4-4b.
23849. **Hyolithes ? corrugatus** Walcott. Cotypes.  
 Upper Cambrian. Highland Range, Central Nevada.  
 Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 271, pl. 21, fig. 2.
23851. **Hyolithes curvatus** Walcott. Cotypes.  
 Upper Cambrian. Highland Range, Central Nevada.  
 Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 271, pl. 21, figs. 1-1a.



15391. **Hyolithes impar** Ford. Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 139, pl. 14, figs. 1b, 1d, 1e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 621, pl. 77, figs. 1b, 1d, 1e.
14995. **Hyolithes neapolis** Clarke. Cotype.  
Naples (Dev.). Parrish Gully, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 56, pl. 3, figs. 4, 5.
23848. **Hyolithes newtoni** Walcott. Cotypes.  
Upper Cambrian. Near Deadwood, Black Hills, South Dakota.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 270, pl. 20, fig. 4.
8579. **Hyolithes primordialis** Hall? Plesiotypes.  
15377. Lower Cambrian. Pioche, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv., W. 100th Merid., 8vo., 1874, p. 6; Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. 1, 1877, p. 37, pl. 1, figs. 5-5e.  
= *Hyolithes billingsi*.
35218. **Hyolithes primordialis** Hall. Plesiotypes.  
35219. Flathead (Mid. Cambrian). Yellowstone National Park.  
St. Croix (Mid. Cambrian). Wisconsin.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 454, pl. 63, figs. 2, 2a.
14885. **Hyolithes princeps** Billings. Plesiotype.  
18320. Lower Cambrian. Bic Harbor, Quebec, Canada, and Conception Bay, Newfoundland.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 135, pl. 13, figs. 5-5b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 621, pl. 76, figs. 1-1e.
18318. **Hyolithes quadricostatus** Shaler and Foerste. Plesiotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 621, pl. 78, figs. 1-1b.
18317. **Hyolithes similis** Walcott. Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 38; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 622, pl. 75, figs. 3-3d.
18319. **Hyolithes terranovicus** Walcott. Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 37; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 623, pl. 78, figs. 3-3d.
17375. **Hyolithes vanuxemi** Walcott. Cotype.  
Upper Pogonip (Ord.). Northeast of Adams Hill, Esmeralda District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 85, pl. 1, figs. 16-16b.



**Hypsipleura gregaria** Stanton. Cotypes.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.

Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 70, pl. 13, figs. 1, 2.

**Hypsipleura ? occidentalis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.

Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 70, pl. 13, figs. 3, 4.

**Idiotrypa parasitica** Ulrich. Holotype and figured sections.  
Osgood (Sil.). Osgood, Indiana.

Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 275, pl. 13,  
figs. 1, 1c.

**Idonearca depressa** White. Holotype.  
Colorado (Cret.). East bank Rio Puerco, six miles below  
Casa Salazan, New Mexico.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 183, pl. 18, figs. 13a, b.

= *Trigonarca depressa*.

**Idonearca shumardi** (Meek and Hayden). Plesiotypes.  
Fox Hills (Cret.). Cheyenne River, near Old Woman  
Fork, Black Hills, Wyoming.

Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 405, pl. 11, figs. 8-11.

= *Cucullæa* (*Idonearca*) *shumardi*.

See *Arca* (*Cucullæa*) *shumardi*.

**Illænurus eurekaensis** Walcott. Cotypes.  
Lower Pogonip (Camb.). Ridge east of Hamburg Ridge,  
Eureka District, Nevada.

Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 97, pl. 12, figs. 4, 4a.

**Illænurus ? ida** Walcott. Cotypes.  
Upper Cambrian. Morgans Creek, Burnett County, Texas.

Walcott, Proc. U. S. Nat. Mus., XIII, 1886, p. 277, pl. 20, fig. 6.

**Olyanassa Paranassa arata** Say. Plesiotype.  
Pliocene. Waccamaw River, South Carolina.

Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. II, 1882,  
p. 228, pl. 20, fig. 18.

**Olyanassa Paranassa isogramma** Dall. Holotype.  
Miocene. Wilmington, North Carolina.

Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. II, 1882,  
p. 228, pl. 20, fig. 19.

**Olyanassa porcina** var. *schizophrya* Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.

Dall, Trans. Wagner Free Inst. Sci. Phila. III, Pt. II, 1882, p. 228.



38034. **Ilyodes divisa** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 422, pl. 38,  
fig. 1; Foss. Insects N. America, I, 1890, p. 398, pl. 30, fig. 1.
38035. **Ilyodes elongata** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 423, pl. 38,  
fig. 2; Foss. Insects N. America, I, 1890, p. 399, pl. 30, fig. 2.
25594. **Indusia calculosa** Scudder. Cotypes.  
Older Tertiary. Horse Creek, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890,  
p. 194, pl. 4, fig. 4.
28950. **Inoceramus acutiplicatus** Stanton. Cotypes.  
28951. Colorado (Cret.). Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 637, pl.  
75, figs. 9, 10; pl. 76, fig. 1.
12462. **Inoceramus altus** Meek. Holotype.  
Fort Pierre (Cret.). Near Medicine Bow Station, Wyoming.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 302;  
Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 43, pl. 14, figs.  
1-1b.
12285. **Inoceramus altus** Meek. Plesiotypes.  
Fort Benton (Cret.). On Belle Fourche River, ten miles  
west of Crow Peak, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 391, pl. 9, fig. 11.
242. **Inoceramus aviculoid[e]s** Meek and Hayden. Holotype  
and paratypes.  
Niobrara (Cret.). Little Blue River near Kansas-Nebraska  
line.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 181.  
= *Inoceramus labiatus aviculoides*.
484. **Inoceramus balchii** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). White River above Bad Lands, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 180.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 56, pl. 15,  
figs. 1a, 1b.
12286. **Inoceramus barabini** Morton. Plesiotypes.  
Fort Pierre (Cret.). Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 398, pl. 7, fig. 7; pl. 9, fig. 8.



8621. *Inoceramus barabini* Morton. Plesiotypes.  
Fort Pierre (Cret.). About one mile south of Boulder,  
Colorado.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 180, pl. 16, fig. 4a.

8585. *Inoceramus crassalatus* White. Cotypes.  
Jurassic. North Fork of Virgin River, Utah.

White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 166, pl. 13, figs. 4a, c.

9892. *Inoceramus cripsii* Mantell. Plesiotype.  
Austin (Cret.). San Antonio, Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 152.

477. *Inoceramus cripsii?* *barabini* (Morton). Plesiotypes.  
Fort Pierre (Cret.). Yellowstone River near Miles City,  
Montana.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 49, pl. 13,  
figs. 1a-c.

See *Inoceramus cuneatus*.

4301. *Inoceramus cripsii?* *subcompressus* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 48, pl. 38, fig.  
2 (bis).

See *Inoceramus subcompressus*.

1261. *Inoceramus cripsii?* *subundatus* Meek. Holotype and  
1348. paratype.  
Nanaimo (Cret.). Sucia Islands, and Comox, Vancouver  
Island.

Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 358,  
pl. 3, figs. 1, 1a, 3, 3a.

See *Inoceramus subundatus*.

477. *Inoceramus cuneatus* Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.

Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1866, p. 180.  
= *Inoceramus cripsii?* *barabini*.

4460. *Inoceramus deformis* Meek. Cotypes and plesiotypes.  
21119. Colorado (Cret.). Colorado City, and near Canyon City,  
Colorado.

Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 146,  
pl. 14, figs. 4, 4a.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
1893, p. 85, pl. 14, fig. 1; pl. 15, figs. 1, 2.

8624. *Inoceramus deformis* Meek. Plesiotypes.  
Colorado (Cret.). Five miles above Pueblo, Colorado.

U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 180.



8622. *Inoceramus dimidius* White. Cotypes.  
Colorado (Cret.). Ojo del Piscado, New Mexico.  
• White, Prelim. Rept. U. S. Geogr. Surv. W. of 100th Merid., 1874, p. 25; Rept. U. S. Geogr. Surv. W. of 100th Merid., IV, 1876, p. 181, pl. 16, fig. 2a-d.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 78, pl. 10, figs. 5, 6.
7850. *Inoceramus erectus* Meek. Cotypes.  
Montana (Cret.). Chalk Creek near Uptown, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 145, pl. 13, figs. 1, a; pl. 14, fig. 3.
2038. *Inoceramus exogyroides* Meek and Hayden. Holotype and paratype.  
Fort Benton (Cret.). Chippewa Point, near Fort Benton, Montana.  
• Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1862, p. 26.—Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 46, pl. 5, figs. 3a-3c.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 83, pl. 17, figs. 1, 2.
8618. *Inoceramus flaccidus* White. Cotypes.  
Colorado (Cret.). Five miles above Pueblo, Colorado.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 178, pl. 16, fig. 1a.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 80, pl. 13, fig. 1.
20257. *Inoceramus fragilis* Hall and Meek. Plesiotypes.  
Colorado (Cret.). Vado del Chamo, New Mexico.  
Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and Green Riv., Macomb, 1876, p. 127, pl. 1, fig. 6.
228. *Inoceramus fragilis* Hall and Meek. Plesiotypes.  
Fort Benton (Cret.). Near mouth of Vermillion River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 42, pl. 5, fig. 5.  
See *Inoceramus perplexus*.
8625. *Inoceramus fragilis* Hall and Meek. Plesiotype.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 178, pl. 15, fig. 3a.
12273. *Inoceramus fragilis* Hall and Meek. Plesiotypes.  
Fort Benton (Cret.). Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 390, pl. 9, fig. 10.
8052. *Inoceramus fragilis* Hall and Meek. Plesiotypes.  
12274. Colorado (Cret.). Black Hills of South Dakota; Huerfano Park, Colorado, etc.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 76, pl. 1, figs. 1-5.  
See *Inoceramus howelli* and *I. perplexus*.



8050. **Inoceramus gilberti** White. Cotypes.  
Colorado (Cret.). Near Last Chance Creek, southern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 285, pl. 3, figs. 1a-c.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 79, pl. 14, figs. 3, 4.
8052. **Inoceramus howelli** White. Cotypes.  
Colorado (Cret.). Lower Potato Valley, southern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 284, pl. 4, figs. 1a-c.  
= *Inoceramus fragilis*.
22868. **Inoceramus labiatus** (Schlotheim). Plesiotypes.  
Colorado (Cret.). Muddy Creek, Huerfano Park, Colorado, etc.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 77, pl. 14, fig. 2.  
See *Inoceramus aviculoides*, *I. problematicus* and varieties, and *I. mytilopsis*.
9839. **Inoceramus mytilopsis** Conrad. Holotype.  
Eagle Ford? (Cret.). Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 152, pl. 5, fig. 6b.  
= *Inoceramus labiatus*.
20247. **Inoceramus nebrascensis** Owen. Holotype.  
Fort Pierre (Cret.). Sage Creek, Cheyenne River, South Dakota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 582, pl. 8A, fig. 1.
774. **Inoceramus oblongus** Meek. Cotypes.  
Fort Pierre (Cret.). Fifteen miles north of Greeley, Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 285, pl. 2, figs. 1a-1b.
23040. **Inoceramus ovatus** Stanton. Holotype.  
Knoxville, Lower Cret. . South Fork of Elder Creek, Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, Feb. 1886, p. 47, pl. 4, fig. 15.
12203. **Inoceramus perplexus** Whitefield. Cotypes.  
12274. Fort Benton, Cret. . On Belle Fourche River, ten miles west of Crow Peak, Black Hills, South Dakota.  
Whitefield, Rept. Geol. and Resources Black Hills, 1880, p. 20, pl. 5, fig. 3, p. 10, figs. 4, 5.  
= *Inoceramus fragilis*.



182. **Inoceramus pertenuis** Meek and Hayden. Holotype and paratypes.  
 Fox Hills (Cret.). Mouth of Judith River, Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 276.—  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 47, pl. 37,  
 figs. 3a, 3b; pl. 38, figs. 3a, 3b.  
 See *Inoceramus ventricosus*.
7802. **Inoceramus problematicus** (Schlotheim) ? Plesiotypes.  
 Colorado (Cret.). Sulphur Creek, Bear River, Wyoming.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 143,  
 pl. 13, figs. 2a, b.  
 = *Inoceramus labiatus*.
237. **Inoceramus problematicus** (Schlotheim). Plesiotypes.  
 Niobrara (Cret.). On Little Blue River, near Kansas-  
 Nebraska line.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 62, pl. 9, fig. 3a.  
 = *Inoceramus labiatus*.
488. **Inoceramus problematicus** (Schlotheim). Plesiotypes.  
 Colorado (Cret.). Bear River, near mouth of Sulphur  
 Creek, Wyoming.  
 Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 358,  
 pl. 4, fig. 1a.  
 = *Inoceramus labiatus*.
12281. **Inoceramus problematicus** (Schlotheim) ? Plesiotypes.  
 Colorado (Cret.). Beaver Creek, Black Hills, South  
 Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 389, pl. 7, fig. 11.  
 = *Inoceramus labiatus*.
8620. **Inoceramus problematicus** (Schlotheim). Plesiotype.  
 Colorado (Cret.). Southeast of Paria, Utah.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 177, pl. 16, fig. 3a.  
 = *Inoceramus labiatus*.
242. **Inoceramus problematicus aviculoides** (Meek and Hay-  
 den). Holotype and paratypes.  
 Niobrara (Cret.). Little Blue River, near Kansas-Nebraska  
 line.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 63, pl. 9, fig. 4.  
 = *Inoceramus labiatus*.
481. **Inoceramus proximus** Tuomey? Plesiotyp  
 Fort Pierre (Cret.). Below Fort Pierre, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 53, pl. 12  
 figs. 7a, 7b.



479. **Inoceramus proximus? subcircularis** Meek. Cotypes.  
Fort Pierre (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 55, pl. 12,  
figs. 2a, 2b.
20246. **Inoceramus sagensis** Owen. Holotype.  
Fort Pierre (Cret.). Sage Creek, Cheyenne River, South  
Dakota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 582, pl.  
7, fig. 3.
12313. **Inoceramus sagensis** Owen. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 393, pl. 7, fig. 12; pl. 8, fig. 2.
485. **Inoceramus sagensis nebrascensis** (Owen). Plesiotype.  
Fort Pierre (Cret.). White River, above Bad Lands,  
South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 52, pl. 13,  
figs. 2a, 2b.
673. **Inoceramus simpsoni** Meek. Holotype.  
Colorado (Cret.). North Platte River, above Platte  
Bridge, South Dakota.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 312; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 360, pl. 4, fig. 4;  
Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 142,  
pl. 13, fig. 3.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893,  
p. 79, pl. 12, fig. 1.
12275. **Inoceramus simpsoni** Meek? Plesiotype.  
Fort Pierre (Cret.). Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 395, pl. 9, fig. 9.
12320. **Inoceramus simpsoni** Meek. Plesiotypes.  
Fort Pierre (Cret.). Old Woman Fork, Black Hills,  
Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 395, pl. 8, fig. 1.
4301. **Inoceramus subcompressus** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 181.  
= *Inoceramus cripisii?* subcompressus.
12276. **Inoceramus sublævis** Hall and Meek. Plesiotypes.  
12277. Fort Pierre (Cret.). Forks of Cheyenne River, and  
Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 393, pl. 10.



1261. **Inoceramus subundatus** Meek. Holotype and paratypes.  
1348. Nanaimo (Cret.). Komooks, eastern shore of Vancouver Island.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1861, p. 315.  
= *Inoceramus cripsii subundatus*.
12314. **Inoceramus tenuilineatus** Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 400, pl. 9, figs. 12, 13.
1906. **Inoceramus tenuirostratus** Meek and Hayden. Holotype.  
Colorado (Cret.). Chippewa Point, near Fort Benton, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1862, p. 27.—  
Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 59, text fig. 5 (as *I. tenuirostris*).—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 83, pl. 16, figs. 3, 4.
9874. **Inoceramus texanus** Conrad. Holotype.  
Cretaceous. Western Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 152, pl. 5, fig. 7.
480. **Inoceramus umbonatus** Meek and Hayden. Holotype and  
2038. paratypes.  
2039. Colorado (Cret.). Near Fort Benton, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 50.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 44, pl. 3, figs. 1a-c; pl. 4, figs. 1a, 1b, 2a, 2b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 81, pl. 18, figs. 1, 2.
1909. **Inoceramus undabundus** Meek and Hayden. Holotype and  
paratypes.  
Colorado (Cret.). Chippewa Point, near Fort Benton, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1862, p. 26.—  
Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 60, pl. 3, figs. 2a, 2b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 84, pl. 16, figs. 1, 2.
483. **Inoceramus vanuxemi** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). White River, above Bad Lands, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 180.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 57, pl. 14, figs. 2a, 2b.
12296. **Inoceramus vanuxemi** Meek and Hayden. Plesiotypes.  
Fort Pierre (Cret.). Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 396, pl. 7, figs. 8, 9; var. p. 398, fig. 10.



182. **Inoceramus ventricosus** Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 87.  
= *Inoceramus pertenuis*.
30210. **Inoceramya concentrica** Ulrich. Cotypes.  
Lias? Woody Island, Kadiak, Alaska.  
Ulrich, Harriman Alaska Exped., IV, 1904, p. 135, pl. 12, figs. 1, 2; pl. 13, fig. 1.
43378. **Intrapora cosciniformis** Nicholson. Plesiotype and figured section.  
Hamilton (Dev.). Arkona, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 532, pl. 43, figs. 6, 6a.
7864. **Iphidea (??) sculptilis** Meek. Cotypes.  
Upper Cambrian. Above Gallatin City, east side of Gallatin River, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 479.  
= *Iphidea sculptilis*.  
See *Kutorgina sculptilis* and *K. minutissima*.
35212. **Iphidea sculptilis** Meek. Plesiotypes.  
Flathead (Mid. Cambrian). Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 417, pl. 60, figs. 5, 5a-c.  
See *Iphidea (??) sculptilis* and *Kutorgina sculptilis*.
113480. **Isapis caloosaensis** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1891, pl. 9, fig. 10.  
*Fossarus Isapis anomala*.
113481. **Ischnochiton tampaensis** Dall. Holotype.  
Oligocene. Bullas Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1891, p. 124, fig. 11.
113482. **Ischnochiton winchelli** Billings. Plesiotype.  
Upper Oligocene. Ansonia Island, Gulf of St. Lawrence.  
Billings, U. S. Geol. Surv. Mon. 1891, p. 124, fig. 12.
113483. **Ischnochiton depressus** Ulrich. Cotypes.  
Kalamazoo (Dev.). Kalamazoo, Michigan.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 532, pl. 43, fig. 6, 6a.



46207. **Ischyrodonta elongata** Ulrich. Holotype and plesiotype.  
 46208. Richmond (Ord.). Oxford, Ohio, and Richmond, Indiana.  
 Ulrich, Amer. Geol., VI, 1890, p. 175; Geol. Surv. Ohio, VII, 1893, p. 675, pl. 54, figs. 20, 21.
46209. **Ischyrodonta miseneri** Ulrich. Holotype.  
 Richmond (Ord.). Richmond, Indiana.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 675, pl. 54, figs. 10, 11.
46210. **Ischyrodonta modioliformis** Ulrich. Cotypes.  
 Richmond (Ord.). Richmond, Indiana.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 676, pl. 54, figs. 4-9.
46211. **Ischyrodonta ovalis** Ulrich. Holotype.  
 Richmond (Ord.). Near Richmond, Indiana.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1892, p. 242; Geol. Surv. Ohio, VII, 1893, p. 674, pl. 54, figs. 12-15.
46212. **Ischyrodonta truncata** Ulrich. Cotypes.  
 Richmond (Ord.). Oxford, Ohio.  
 Ulrich, Amer. Geol., VI, 1890, p. 174, figs. 11a-e; Geol. Surv. Ohio, VII, 1893, p. 672, text figs. a-e.
46213. **Ischyrodonta unionoides** (Meek). Plesiotypes.  
 Lorraine (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 677, pl. 54, figs. 1-3.
146116. **Isocardia carolina** Dall. Holotype.  
 Miocene. Edgecombe County, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1067, pl. 46, fig. 22.
115773. **Isocardia floridana** Dall. Holotype.  
 Vicksburgian (Oligocene). Arredondo, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1066, pl. 46, figs. 21, 26.
30235. **Isocardia medialis** (Conrad). Plesiotypes.  
 Buda (Lower Cret.). Near Austin, Texas.  
 Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 27, pl. 14, figs. 4, 5; pl. 15, figs. 1, 2.
41289. **Isochilina amiana** Ulrich. Holotype.  
 Chazy? (Ord.). Sussex street, Ottawa, Canada.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 180, pl. 11, figs. 12a-12c.
41290. **Isochilina amiana insignis** Ulrich. Holotype.  
 Chazy? (Ord.). Sussex street, Ottawa, Canada.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 181, pl. 11, fig. 13.



41291. **Isochilina ampla** Ulrich. Cotypes.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 179,  
pl. 11, figs. 8a-d.
41292. **Isochilina jonesi** Wetherby. Plesiotype.  
Trenton (Ord.). Near Harrodsburg, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 179,  
pl. 11, figs. 9a-c.
43155. **Isochilina kentuckyensis** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 179,  
pl. 11, figs. 11a-d.  
*Leperditia armata.*
41826. **Isochilina rectangularis** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 182,  
pl. 16, figs. 2a-c.
41288. **Isochilina saffordi** Ulrich. Holotype.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 178,  
pl. 11, figs. 10a-d.
41204. **Isochilina subnodosa** Ulrich. Holotype.  
Trenton (Ord.). Perryville, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 177,  
pl. 11, fig. 7a-c.
23793. **Isotelus cyclops** Green. Plastotype.  
Mohawkian (Ord.). Western New York.  
Green, Mon. Transactions N. America. Phila. 1832, p. 69. Cast  
No. 24.  
*Isotelus pterycephalus.*
23794. **Isotelus gigas** DeKay. Plastotype.  
Onondaga (Dev.). Chautauque, Ohio.  
DeKay, Mon. Transactions N. America. Phila. 1832, p. 77. Cast  
No. 25.
23795. **Isotelus maximus** DeKay. Plastotype.  
Onondaga (Dev.). Chautauque, Ohio.  
DeKay, Mon. Transactions N. America. Phila. 1832, p. 77. Cast  
No. 26.
23796. **Isotelus magnificus** DeKay. Plastotype.  
Onondaga (Dev.). Chautauque, Ohio.  
DeKay, Mon. Transactions N. America. Phila. 1832, p. 77. Cast  
No. 27.  
*Isotelus pterycephalus.*



5005. **Isotelus planus** DeKay. Plastotype.  
Utica (Ord.). Near Newport, Kentucky.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 68. Cast  
No. 23.  
= *Isotelus platycephalus*.
4895. **Isotelus stegops** Green. Plastotype.  
Utica (Ord.). Newport, Kentucky.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 71. Cast  
Nos. 26, 27.  
= *Isotelus platycephalus*.
41902. **Isotelus susæ** Whitfield. Plesiotype.  
Richmond (Ord.). Two miles east of Spring Valley,  
Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 708, figs. 10, 11.
43376. **Isotrypa** (? **Tectulipora**) **gothlandica** Ulrich. Holotype  
and figured sections.  
Silurian. Island of Gotland, Sweden.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 678, pl. 54, figs. 6, 6c.
18445. **Isoxys chilhoweana** Walcott. Cotypes.  
Lower Cambrian. Near Montvale Springs, Chilhowee  
Mountain, Tennessee.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 626, pl.  
80, figs. 10, 10a.
35056. **Jaekelocystis avellana** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 226,  
text fig. 28; pl. 37, figs. 11, 12.
35055. **Jaekelocystis hartleyi** Schuchert. Cotypes.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Amer. Geol., XXXII, 1903, p. 231; Smithsonian  
Misc. Coll., Quart., XLVII, 1904, p. 224, text fig. 27, pl. 37,  
figs. 4-8.
35057. **Jaekelocystis papillatus** Schuchert. Holotype and paratype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 225,  
pl. 37, figs. 9, 10.
41497. **Jonesella crassa** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 123, 1  
7, figs. 11a-c.  
= *Ctenobolbina crassa*.



41359. **Jonesella crepidiformis** (Ulrich). Cotypes  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 122, p.  
7, figs. 8a-c.  
See *Leperditia crepidiformis*.
41358. **Jonesella digitata** Ulrich. Holotype  
Richmond (Ord.). Marion County, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 122, p.  
7, figs. 10a-c.
41529. **Jonesella obscura** Ulrich. Cotypes  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, P.  
II, 1894, p. 668, pl. 44, figs. 17-19.
41360. **Jonesella pedigera** Ulrich. Holotype  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 122, p.  
7, figs. 9a, b.
114674. **Julia floridana** Dall. Cotypes  
Oligocene. Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
811, pl. 35, figs. 1, 2, 3.
38110. **Jupiteria charon** Scudder. Holotype  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Eighth Ann. Rept. U. S. Geol. Surv., 1889, p. 450, p.  
52, figs. 14, 15.
26703. **Karlia minor** Walcott. Cotypes  
Middle Cambrian. Manuels Brook, Conception Bay  
Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XI, 1888, p. 445.
43158. **Kirkbya** (? **Barychilina**) **costata** (McCoy). Plesiotype  
Spergen Hill (Miss.). Columbia, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 208, p.  
18, figs. 2a, 2b.
41581. **Kirkbya cymbula** Ulrich. Cotypes  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 184, p.  
8, figs. 15-18.
41580. **Kirkbya germana** Ulrich. Cotypes  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIX, 1900, p. 185, p.  
8, figs. 19-22.
41356. **Kirkbya lindahli** Ulrich. Holotype  
Warsaw (Miss.). Colum.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 207, p.  
18, figs. 6a-c.



41354. **Kirkbya oblonga** Jones and Kirkby. Plesiotype.  
41355. Chester (Miss.). Grayson Springs, Kentucky; Chester,  
Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 206, pl.  
18, figs. 4a, b; 5a, b.
41351. **Kirkbya parallela** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 192, pl.  
15, figs. 2a, b.
41700. **Kirkbya semimuralis** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 193, pl.  
15, figs. 3a, b; 4a-c.
41352. **Kirkbya subquadrata** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 192, pl.  
15, figs. 1a-c.
41357. **Kirkbya tricollina** Jones and Kirkby. Plesiotype.  
Chester (Miss.). Grayson Springs, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 207, pl.  
18, figs. 8a, b.
41353. **Kirkbya venosa** Ulrich. Holotype.  
Chester (Miss.). Grayson Springs, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 208, pl.  
18, figs. 3a, b.
45868. **Kokenia costalis** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 882, pl. 64, figs. 46-49.
- 41717 **Krausella arcuata** Ulrich. Cotypes.  
to Stones River (Ord.). High Bridge, Kentucky; Mineral  
41719. Point, Wisconsin; Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 692, pl. 44, figs. 47-53.
41727. **Krausella inæqualis** Ulrich. Holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 692, pl. 44, figs. 44-46.
37967. **Kustarachne tenuipes** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 450, pl. 40,  
fig. 7; Foss. Insects N. America, 1890, p. 426, pl. 32, fig. 7.



15337. **Kutorgina cingulata** (Billings). Plesiotyp  
Lower Cambrian. Two miles east of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 102, pl. 9, figs. 1-1h; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 609, figs. 1-1h.
15329. **Kutorgina labradorica** (Billings). Plesiotyp  
Lower Cambrian. Two miles east of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 104, pl. 9, figs. 2-2b.  
= *Iphidea labradorica swantonensis*.
18309. **Kutorgina labradorica** (Billings). Plesiotyp  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 609, pl. 6, figs. 3-3b.  
= *Iphidea labradorica*.
15329. **Kutorgina labradorica swantonensis** Walcott. Cotyp  
Lower Cambrian. East of Swanton, Vermont.  
Walcott, Proc. U. S. Nat. Mus., Vol. XII, 1889, p. 36; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 609, pl. 69, figs. 2-2b.  
= *Iphidea labradorica swantonensis*.  
See *Kutorgina labradorica* 15329.
24551. **Kutorgina minutissima** Hall and Whitfield. Cotyp  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th. Par., IV, Pt. 1, 1877, p. 207, pl. 1, figs. 11, 12.  
= *Iphidea sculptilis*.  
See *Kutorgina sculptilis*.
15331. **Kutorgina pannula** (White). Holotype and plesiotyp  
15333. Lower Cambrian. Pioche, Nevada, and Washington County, New York.  
Walcott, Amer. Journ. Sci., 3, XXXIV, 1887, p. 190, pl. 1, figs. 14, 14b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 609, figs. 5-5f; Bull. No. 30, U. S. Geol. Surv., 1886, p. 106, pl. 7, figs. 3, 3a; pl. 8, figs. 2-2c.  
= *Iphidea pannula*.  
See *Trematis ? pannulus*.
15335. **Kutorgina prospectensis** Walcott. Cotyp  
Lower Cambrian. Prospect Mountain, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 19, pl. 9, figs. 1a, 1b; Bull. No. 30, U. S. Geol. Surv., 1886, p. 106, pl. 9, figs. 3, 3a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 610, figs. 4, 4a.  
= *Iphidea prospectensis*.



7864. **Kutorgina sculptilis** (Meek). Cotypes and plesiotypes.  
 24550. Upper Cambrian. Eureka District, Nevada.  
 24551. Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 20, pl. 1, figs.  
 7-7b; pl. 9, fig. 7.  
 = *Iphidea sculptilis*.  
 See *Kutorgina minutissima*.
24591. **Kutorgina whitfieldi** Walcott. Cotypes.  
 Middle Cambrian. Secret Canyon, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 18, pl. 9, figs. 4-4b.  
 = *Billingsella whitfieldi*.
25593. **Labiduromma tertiarum** (Scudder). Cotype.  
 Florissant (Oligocene). Florissant, Colorado.  
 Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890, p.  
 209, pl. 16, fig. 18.
- 26151 **Laotira cambria** Walcott. Cotypes.  
 to Middle Cambrian. Coosa Valley, Alabama.  
 26274. Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 32, pls. 5-19,  
 26281. 21-23, text figures 11-13; Proc. U. S. Nat. Mus., XVIII, 1896,  
 p. 613, pl. 32, figs. 1-8.
46564. **Lasiocladia hindei** Ulrich. Holotype.  
 Keokuk (Miss.). Kings Mountain, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 249
25591. **Lasius terreus** Scudder. Holotype.  
 Older Tertiary. Green River, Wyoming.  
 Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terrs., 1890, p.  
 618, pl. 10, fig. 23.
11547. **Latia dallii** White. Cotypes.  
 Miocene. Fifty miles below Salmon Forks, Snake River,  
 Idaho.  
 White, Proc. U. S. Nat. Mus., V, 1882, p. 100, pl. 5, figs. 17-20;  
 Third Ann. Rept. U. S. Geol. Surv., 1883, p. 451, pl. 32, figs.  
 37-40.
112122. **Latirus callimorphus** Dall. Holotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
 107, pl. 8, fig. 1.
112116. **Latirus floridanus** Heilprin. Plesiotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
 106, pl. 8, fig. 2.
112121. **Latirus (floridanus var ?) multilineatus** Dall. Cotype.  
 Oligocene. Ballast Point, Tampa, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 10



97497. **Latirus hypsipettus** Dall. Holotype  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
108, pl. 10, fig. 5.
135158. **Latirus indistinctus** Aldrich. Holotype  
Eocene. Wayne County, Mississippi.  
Aldrich, The Nautilus, VII, No. 9, 1894, p. 99, pl. 4, fig. 6.
112123. **Latirus rugatus** Dall. Holotype  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
pl. 8, figs. 6, 7.
97496. **Latirus tessellatus** Dall. Holotype  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
pl. 10, fig. 8a.
38003. **Latzelia primordialis** Scudder. Holotype  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 419, pl.  
fig. 3; Foss. Insects N. America, I, 1890, p. 395, pl. 30, fig.  
3.
8035. **Lecythiocrinus olliculæformis** White. Holotype  
Upper Carboniferous. Thirty miles west of Humboldt,  
Kansas.  
White, Proc. U. S. Nat. Mus., II, 1880, p. 257, pl. 1, figs.  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 123,  
35, figs. 2a, 2b.  
= *Menocrinus olliculæformis*.
145627. **Leda acala** Dall. Holotype  
Chickasawan (Eocene). Woods Bluff, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1890,  
586, pl. 32, fig. 3.
145656. **Leda acrybia** Dall. Cotype  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV,  
p. 590.
157829. **Leda alæformis** (Gabb). Plesiotype  
Lower Tejon (Eocene). One mile southeast of Lakeview,  
Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I,  
p. 1040, pl. 64, figs. 6, 7.
135140. **Leda albirupina** Harris. Cotype  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, II, 1894, p. 148, pl.  
fig. 1.



145657. **Leda amydra** Dall. Holotype.  
Miocene. Near Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 591.
1948. **Leda bisulcata** Meek and Hayden. Holotype.  
Montana (Cret.). Deer Creek, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 440.  
See *Nuculana bisulcata*, 1948, 12265.
115553. **Leda bisulcata** Guppy. Holotype.  
Oligocene. Jamaica.  
Guppy, Geol. Mag., London, Dec. I, IV, 1867, p. 500, fig. 2; Proc.  
Sci. Assoc. Trinidad, 1882, p. 173, pl. 7, fig. 7.  
= *Leda indigena*.
145646. **Leda catasarca** Dall. Holotype.  
Eocene. Wahtubbee Hills, Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 588, pl. 32, fig. 13.
115558. **Leda clara** Guppy. Holotype.  
Miocene. Jamaica.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 442, pl. 17,  
figs. 1, 1a; Proc. Sci. Assoc. Trinidad, 1882, p. 172, pl. 7, fig. 4.
24331. **Leda diversa** (Hall). Plesiotype  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 78, pl. 8  
fig. 12.
135823. **Leda dodona** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 589, pl. 32, fig. 6.
145651. **Leda flexuosa** Heilprin. Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 589, pl. 38, figs. 5, 5a.
157840. **Leda gabbi** (Conrad). Plesiotypes.  
Lower Tejon (Eocene). About one mile east of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1041, pl. 64, fig. 8.
23049. **Leda glabra** Stanton. Holotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 53, pl. 6, fig. 15.



115024. **Leda hypsoma** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 589, pl. 32, fig. 2.
115556. **Leda illecta** Guppy. Cotype.  
Eocene. Manzanillo, Trinidad, West Indies.  
Guppy, Proc. Sci. Assoc. Trinidad, 1867, p. 174; *ibid.*, 1882, p. 173,  
pl. 7, fig. 5.
114806. **Leda** (*linifera* var. ?) **canonica** Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 591.
114808. **Leda linifera chipolana** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 591.
162528. **Leda minuta præcursor** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Cal. Acad. Sci., III, 1903, p. 97, pl. 17, fig. 6.
145635. **Leda multilineata** Conrad. Plesiotypes.  
Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 588,  
pl. 25, figs. 11, 11b.
115559. **Leda peltella** Dall. Holotype.  
Oligocene. Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 579,  
pl. 32, fig. 5.
115557. **Leda perlepida** Guppy. Holotype.  
Pliocene. Matura, Trinidad.  
Guppy, Proc. Sci. Assoc. Trinidad, 1867, p. 173; Geol. Mag., Lon-  
don, Dec. II, I, 1874, p. 442, pl. 18, fig. 9.
145659. **Leda phalacra** Dall. Holotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 592.
145633. **Leda pharcida** Dall. Holotype.  
Chickasawan (Eocene). Woods Bluff, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 587,  
pl. 32, fig. 8.
3957. **Leda subscitula** Meek and Hayden. Cotypes.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 79.  
= *Yoldia?* *subscitula*.



114841. **Leda trochilia** Dall. Cotypes.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 590,  
pl. 32, figs. 4, 12.
21768. **Leiocidaris hemigranosus** (Shumard). Plesiotype.  
Denison (Lower Cret.). Texas.  
Clark, Bull. No. 97. U. S. Geol. Surv., 1893, p. 38, pl. 9, figs. 1a-c.
- Leioclema. See Lioclema.
- Leiopistha. See Liopistha.
13882. **Leiopteria rafinesquii** Hall. Plesiotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 166, pl. 5, figs. 10, 10a.
- Leiorhynchus. See Liorhynchus.
115443. **Leiostraca clavata** Guppy. Holotype.  
Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 408, pl. 18, fig. 16.
41304. **Leperditella canalis** Ulrich. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 637, pl. 43, figs. 1-3.
41315. **Leperditella ? dorsicornis** Ulrich. Holotype.  
Richmond (Ord.). Savannah, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 639, pl. 45, figs. 19, 20, 20a.  
See Leperditia (? Primitia) dorsicornis.
41307. **Leperditella germana** Ulrich. Holotype.  
Stones River (Ord.). Mineral Point, Wisconsin.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 638, pl. 45, figs. 24-26.  
See Leperditia germana.
41306. **Leperditella macra** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 638, pl. 43, figs. 7-9.
41308. **Leperditella persimilis** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 637, pl. 43, figs. 4-6.
41312. **Leperditia æquilatera** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 265, pl. 9, figs. 9-11.  
= Leperditella æquilatera.



41281. **Leperditia appressa** Ulrich. Coty  
 41282. Trenton (Ord.). Near Harrodsburg and Danville, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 170, figs. 11, 11a, 11b, 11c, 11d, 11e, 11f, 11g, 11h, 11i, 11j, 11k, 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z.
15401. **Leperditia? argenta** Walcott. Coty  
 Middle Cambrian. One mile below Argenta, Big Cottonwood Canyon, Utah.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 146, pl. 8, fig. 1.
41365. **Leperditia bivertex** Ulrich. Holot  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 11, figs. 5, 5a.
17411. **Leperditia bivia** White. Coty  
 Middle Ordovician. Queen Spring Hill, Schell Creek Range, Nevada.  
 White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., p. 11; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, 1877, p. 58, pl. 3, figs. 7a-7d.
41276. **Leperditia cæcigena** Miller. Plesioty  
 Richmond (Ord.). Indian Kentuck Creek, near Madison, Indiana.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 170, figs. 11, 11a, 11b, 11c, 11d, 11e, 11f, 11g, 11h, 11i, 11j, 11k, 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z.
41279. **Leperditia cæcigena frankfortensis** Ulrich. Coty  
 Trenton (Ord.). Frankfort, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 170, figs. 11, 11a, 11b, 11c, 11d, 11e, 11f, 11g, 11h, 11i, 11j, 11k, 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z.
41359. **Leperditia crepiformis** Ulrich. Coty  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 10, figs. 3, 3a.  
 = *Jonesella crepidiformis*.
17448. **Leperditia (Isoxys) dermatoides** Walcott. Holot  
 Lower Cambrian. Washington County, New York.  
 Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 192, pl. 1, figs. 13, 13a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 62, figs. 80, 80a, 80b, 80c, 80d, 80e, 80f, 80g, 80h, 80i, 80j, 80k, 80l, 80m, 80n, 80o, 80p, 80q, 80r, 80s, 80t, 80u, 80v, 80w, 80x, 80y, 80z.
41315. **Leperditia (? Primitia) dorsicornis** Ulrich. Holot  
 Richmond (Ord.). Savannah, Illinois.  
 Ulrich, Amer. Geol., X, 1892, p. 267, pl. 9, figs. 24-26.  
 = *Leperditella dorsicornis*.
41263. **Leperditia fabulites** (Conrad). Plesioty  
 41267. Stones River (Ord.). Beloit, Wisconsin; Lebanon, Tennessee.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 173, figs. 1a-1d; 2.



41261. **Leperditia fabulites** (Conrad). Plesiotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 634, pl. 43, figs. 10-14.
41834. **Leperditia fimbriata** Ulrich. Holotype.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 268, pl. 9, figs. 34-36.  
= *Aparchites fimbriatus*.
41307. **Leperditia germana** Ulrich. Holotype.  
Stones River (Ord.). Mineral Point, Wisconsin.  
Ulrich, Amer. Geol., X, 1892, p. 266, pl. 9, figs. 16-18.  
= *Leperditella germana*.
41828. **Leperditia granilabiata** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 268, pl. 9, figs. 31-33.  
= *Aparchites granilabiatus*.
41311. **Leperditia inflata** Ulrich. Cotypes.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 265, pl. 9, figs. 12-15.  
= *Leperditella inflata*.
41272. **Leperditia linneyi** Ulrich. Cotypes.  
Trenton (Ord.). Near Harrodsburg, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 174, pl. 11,  
figs. 3a-3e.
41837. **Leperditia millepunctata** Ulrich. Holotype.  
Stones River (Ord.). Fountain, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 268, pl. 9, figs. 37-39.  
= *Aparchites millepunctatus*.
41309. **Leperditia mundula** Ulrich. Cotypes.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 265, pl. 9, figs. 4-8.  
= *Leperditella mundula*.
41844. **Leperditia nicklesi** Ulrich. Cotypes.  
Chester (Miss.). Grayson Springs Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 200, pl.  
18, figs. 1a-e.
41711. **Leperditia radiata** Ulrich. Cotypes.  
Utica (Ord.). First Ward, Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 9, pl. 7  
figs. 2, 2a, 2b.  
= *Elpe radiata*.



14005. **Leperditia rotundata** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 206, pl. 16, fig. 5.
41825. **Leperditia (?) subrotunda** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 181, pl. 16, figs. 1a-c.
41313. **Leperditia sulcata** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 266, pl. 9, figs. 19-21.  
= *Leperditella sulcata*.
41314. **Leperditia sulcata ventricornis** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 266, pl. 9, figs. 22, 23.  
= *Leperditella sulcata ventricornis*.
41310. **Leperditia tumida** Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Amer. Geol., X, 1892, p. 264, pl. 9, figs. 1-3.  
= *Leperditella tumida*.
41284. **Leperditia tumidula** Ulrich. Holotype.  
Stones River (Ord.). Danville, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 175, pl. 11, figs. 4a-4c.
41467. **Leperditia unicornis** Ulrich. Holotype.  
Utica (Ord.). One mile west of Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 10, pl. 7, figs. 4, 4a, 4b.  
= *Primitiella unicornis*.
34131. **Lepidodiscus alleganius** Clarke. Cotype.  
Chemung (Dev.). Near Sabinsville, Tioga County, Pennsylvania.  
Clarke, Bull. 49, N. Y. State Museum, 1901, p. 194, pl. 10, fig. 3.
46533. **Lepidolites dickhauti** Ulrich. Cotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 21, pl. 7, figs. 17-17b; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, pl. F, figs. 11, 12.  
See *Lepidolites elongatus*.
46533. **Lepidolites elongatus** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 22, pl. 7, fig. 16.  
= *Lepidolites dickhauti*.



35062. **Lepocrinites manlius** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, pp. 214,  
215, text fig. 23, pl. 37, figs. 2, 3; pl. 39, figs. 15, 16.
17219. **Leptæna melita** Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 208, pl. 1, figs. 13, 14.—Walcott, Mon. VIII, U. S.  
Geol. Surv., 1884, p. 22.  
= *Dalmanella melita*.
8552. **Leptæna sericea** Sowerby. Plesiotypes.  
Richmond (Ord.). Silver City, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 70, pl. 4, fig. 7.  
= *Plectambonites sericea*.
17875. **Leptæna trilobata** Owen. Holotype.  
Trenton (Ord.). Turkey River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 584, pl. 2,  
figs. 17, 18.  
= *Strophomena trilobata*.
13880. **Leptodesma transversa** Walcott. Holotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 167, pl. 5, fig. 13.
15308. **Leptomitius zitteli** Walcott. Cotypes.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 89, pl. 2, figs. 2,  
2a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 597, pl. 49,  
figs. 1, 1a.
24528. **Leptopora typa** Winchell. Plesiotype.  
Kinderhook (Miss.). Burlington, Iowa.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 122, pl. 34, figs. 12a, 12b.
8230. **Leptopora winchelli** White. Cotypes.  
Carboniferous. Near Forks of Logan River, Utah.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 211; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 121, pl. 34, fig. 11a.
7895. **Leptosolen conradi** Meek. Holotype and paratype.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 311;  
Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 253, pl. 2, figs. 12  
12b.



43189. **Leptotrypa acervulosa** Ulrich. Holotype and figured section  
Trenton (Ord.). Decorah, Iowa.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1893, p. 318, pl. 27, figs. 24, 25.  
=Cyphotrypa acervulosa.
43611. **Leptotrypa claviformis** Ulrich. Cotypes and figured section  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1893, p. 319, pl. 27, figs. 20, 21.
43718. **Leptotrypa clavis** Ulrich. Cotypes and figured section  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 161, pl.  
figs. 3, 3a.  
=Stigmatella clavis.
43677. **Leptotrypa cortex** Ulrich. Holotype  
Utica (Ord.). Newport, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 162.
43309. **Leptotrypa filiosa** D'Orbigny. Figured sections  
plesiotyp  
Trenton (Ord.). Calhoun County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 456, pl. 36, figs. 7, 7a.  
=Amplexopora filiosa.
44057. **Leptotrypa hexagonalis** Ulrich. Holotype  
Stones River (Ord.). Mineral Point, Wisconsin.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 455, pl. 36, figs. 6, 6a.
43676. **Leptotrypa minima** Ulrich. Cotypes and figured section  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 159, pl.  
figs. 2-2b.
43678. **Leptotrypa ornata** Ulrich. Cotypes and figured section  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 160, p.  
6, figs. 4, 4a.
43395. **Leptotrypa semipilaris** Ulrich. Cotypes and figured  
section  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 457, pl. 36, figs. 5-5d.  
=Cyphotrypa semipilaris.
43394. **Leptotrypa stidhami** Ulrich. Cotypes and figured section  
Richmond (Ord.). Brown County, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 456, pl. 36, figs. 4-4b.  
=Cyphotrypa stidhami.



25532. **Lepyrus ? evictus** Scudder. Holotype.  
Older Tertiary. Green River, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 88, pl. 10, fig. 10.
38223. **Lestes (Stenolestes) iris** Scudder. Cotypes.  
Upper Miocene. Oeningen, Baden, Germany.  
Scudder, Geol. Mag., London, Dec. IV, II, 1895, p. 119, pl. 6, fig. 3.
41949. **Lichas (Hoplolichas) bicornis** Ulrich. Holotype.  
Richmond (Ord.). Two miles east of Spring Valley,  
Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 272, figs. 2, a, b.  
= *Platymetopus bicornis*.
40690. **Lichas harrisi** Miller. Holotype.  
Richmond (Ord.). Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 106, pl. 3,  
fig. 9.
41950. **Lichas (Hoplolichas) robbinsi** Ulrich. Holotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 271, figs. 1a, b.  
= *Platymetopus robbinsi*.
43038. **Lichas trentonensis** Hall. Cotype.  
Lorraine (Ord.). Lebanon, Ohio.  
Hall, Nat. Hist. New York, Pal. I, 1847, p. 235, pl. 64, fig. 1e.  
= *Lichas halli*.
42950. **Lichenaria minor** Ulrich. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1893, p. 84, fig. 5.
107803. **Lima (Mantellum) caloosana** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 767, pl. 28, fig. 3.
107801. **Lima (Mantellum) carolinensis** Dall. Holotype.  
Miocene. Darlington Court-House, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 767, pl. 35, fig. 21.
28932. **Lima cinnabarensis** Stanton. Holotype.  
Jurassic. Cinnabar Mountain, Montana.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p.  
pl. 72, fig. 8.



9831. *Lima leonensis* Conrad. Cotypes.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 151, pl. 5, figs. 3a-c.
23025. *Lima multilineata* Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 36,  
pl. 2, figs. 4, 5.
157826. *Lima multiradiata* Gabb. Plesiotypes.  
Lower Tejon (Eocene). One mile southeast of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1038, pl. 63, figs. 7, 8.
12539. *Lima (Plagiostoma) occidentalis* Hall and Whitfield. Holotype.  
Jurassic. Flaming Gorge, Uinta Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 292, pl. 7, fig. 23.
6486. *Lima retifera* Shumard. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska, 1872, p. 188, pl. 9,  
figs. 5a, 5b.—White, Thirteenth Ann. Rept. Geol. Surv. Indi-  
ana, 1884, p. 138, pl. 28, fig. 4.
30217. *Lima shumardi* Shattuck. Holotype.  
Buda (Lower Cret.). Probably Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 17, pl. 5,  
fig. 11.
107800. *Lima (Lima) smirna* Dall. Holotype.  
Oligocene. Hillsborough Bay, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 766, pl. 30, fig. 3.
107797. *Lima (Lima) tampaënsis* Dall. Holotype.  
Oligocene. Hillsborough Bay, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 766, pl. 35, fig. 18.
107799. *Lima (tampaënsis var.?) costulata* Dall. Holotype.  
Oligocene. Hillsborough Bay, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 766, pl. 35, fig. 24.
22942. *Lima utahensis* Stanton. Cotypes.  
Colorado (Cret.). Southeast of Paria and Upper Kanab  
Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 71, pl. 9, fig. 5.  
See *Lima wacoensis* 8656.



107795. **Lima (Lima) vicksburgiana** Dall. Holotype.  
Oligocene. Levy County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 765, pl. 35, fig. 20.
8656. **Lima wacoensis** Roemer. Plesiotypes.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th merid., IV, Pt. I, 1876, p. 176, pl. 17, figs. 4a-c.  
= *Lima utahensis*.
9889. **Lima wacoensis** Roemer. Plesiotypes.  
Washita (Lower Cret.). Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 151, pl. 5, figs. 4a, 4b.
30218. **Lima wacoensis** Roemer. Plesiotype.  
Buda (Low. Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 18, pl. 5, fig. 10.
135679. **Limæa solida** Dall. Cotypes.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 769, pl. 35, figs. 4, 5.
25526. **Limalophus compositus** Scudder. Cotypes.  
Older Tertiary. Green River, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 71, pl. 10, fig. 2.
25528. **Limalophus contractus** Scudder. Cotypes.  
Older Tertiary. Green River, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 72, pl. 10, fig. 3.
27102. **Limipecten texanus** Girty. Holotype and paratypes.  
Cisco (Upper Carb.). Graham, Young County, Texas.  
Girty, Proc. U. S. Nat. Mus., XXVII, 1904, p. 722, pl. 45, figs. 1-3; pl. 46, fig. 4?; pl. 47, figs. 1-3.
27103. **Limipecten texanus grandicostatus** Girty. Holotype.  
Cisco (Upper Carb.). Graham, Young County, Texas.  
Girty, Proc. U. S. Nat. Mus., XXVII, 1904, p. 723, pl. 46, figs. 1-3.
20056. **Limnæa? accelerata** White. Cotypes.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 20, pl. 4, figs. 12-15.
20054. **Limnæa ativuncula** White. Cotypes.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 20, pl. 4, figs. 10, 11.
8207. **Limnæa? compactilis** Meek. Holotype.  
Laramie (Cret.). Separation Station, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 445, pl. 26, fig. 14.



20055. *Limnæa consortis* White. Cotypes.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 20, pl. 4, figs. 8, 9.
8097. *Limnæa (Polyrhytis) kingii* Meek. Holotype.  
Miocene. Cache Valley, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 192, text figs. 6, 7.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 446, pl. 32, figs. 30, 31.
8907. *Limnæa (Leptolimnæa) minuscula* White. Cotypes.  
Eocene. Three miles east of Table Rock Station, Wyoming.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 160; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 446, pl. 29, figs. 24, 25.
20065. *Limnæa (Leptolimnæa) minuscula* White. Plesiotype.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 22, pl. 2, figs. 10–12.
685. *Limnæa nitidula* Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur Creek, Wyoming.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 363, pl. 5, fig. 14.  
See *Limnæa (Limnophysa) nitidula*.
23116. *Limnæa nitidula* Meek. Cotypes.  
Bear River (Cret.). Sulphur Creek, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 45, pl. 6, figs. 1–3.
12500. *Limnæa (Limnophysa) nitidula* Meek. Plesiotypes.  
Bear River (Cret.). Mouth of Sulphur Creek, Wyoming.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 181, pl. 17, figs. 5, 5a.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 445, pl. 6, figs. 15, 16.  
See *Limnæa nitidula* and *Melania? nitidula*.
2119. *Limnæa shumardi* Meek. Holotype.  
White River (Miocene). Pinots Creek, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 599, pl. 45, figs. 6a, 6b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 446, pl. 32, figs. 28, 29.
692. *Limnæa similis* Meek. Cotypes.  
694. Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 314; Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 367, pl. 5, figs. 2a, b; Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 191, pl. 17, figs. 3, a.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 445, pl. 29, figs. 20, 21.



12488. *Limnæa tenuicosta* Meek and Hayden. Holotype.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 119.  
=*Limnæa* (*Pleurolimnæa*) *tenuicostata*.
12488. *Limnæa* (*Pleurolimnæa*) *tenuicostata* (Meek and Hayden). Holotype.  
— Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 534, pl. 44,  
figs. 13a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 445, pl. 23, fig. 24.  
See *Limnæa tenuicosta*.
693. *Limnæa vetusta* Meek. Cotypes.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 314; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 367, pl. 5, figs. 3a, 3b.—  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 445, pl.  
29, figs. 22, 23.
693. *Limnæa* (*Limnophysa*) *vetusta* Meek. Cotypes.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 191,  
pl. 17, figs. 4a, b.
350. *Limopsis parvula* (Meek and Hayden). Holotype and  
paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 97, pl. 28, figs.  
17a-c.  
See *Pectunculina parvula*.
107152. *Limopsis subangularis* Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 325, pl. 30, fig. 2
13878. *Limoptera sarmenticia* Walcott. Cotypes.  
Middle Devonian. Brush and Atrypa Peaks, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 167, pl. 5, figs.  
3-3b.
396. *Linearia?* *formosa* (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Twenty miles below Cannon Ball River  
on the Missouri, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 199, pl. 30, fig.  
See *Tellina?* *formosa*.



14286. *Lingula mytiloides* Sowerby. Plesiotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 279, pl. 18, fig. 1.
3650. *Lingula ovata* Dana. Cotype  
Carboniferous. Black Head, District of Illawarra, New  
South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 685, Atlas, pl. 18,  
figs. 6, 6a, 6b.  
[Not a *Lingula*, probably a pelecypod.]
45211. *Lingula philomela* Billings. Plastotype  
Richmond (Ord.). Granger, Minnesota.  
Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. I, 1893, p. 342, pl. 29, figs. 7, 8.
17800. *Lingula pinnaformis* Owen. Cotype  
Middle Cambrian. Falls of the St. Croix, Minnesota.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 5,  
pl. 1 B, fig. 8.  
= *Lingulepis pinnaformis*.
1027. *Lingula prima* Conrad. Plesiotype  
Upper Cambrian. Black Hills, South Dakota.  
Meek and Hayden, Amer. Journ. Sci. (2), XXXIII, 1862, p. 73,  
fig. 1.  
*Lingulepis prima*.
- Lingula prima* Owen, 1852 = *Lingulepis pinnaformis*.
17873. *Lingula quadrata* Richwald? Plesiotype  
Trenton (Ord.). Near Dubuque, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 1,  
fig. 8.  
[This appears to be the same specimen figured in Geol. Expl. Rep.  
Iowa, Wis., and Ill., 1844, pl. XV, fig. 1.]  
*Lingula iowensis*.
24422. *Lingula scotica* Davidson? Plastotype  
Berea, Miss. Berea, Ohio.  
Meek, Geol. Surv. Ohio, Pal. II, 1873, p. 276, pl. 12, fig. 2.
24423. *Lingula scotica nebrascensis* Meek Holotype  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska, Hayden, 1893,  
p. 138, pl. 8, figs. 34, 35.  
*Lingula glauca nebrascensis*.
24424. *Lingula subopercula* (a) Hall and Meek Plesiotype  
Carboniferous. Ten miles southeast of Fort Wingate, New  
Mexico.  
Hall and Meek, U. S. Geol. Surv. Prof. Paper IV, 1892,  
p. 138, pl. 8, fig. 34.



14977. *Lingula triquetra* Clarke. Holotype.  
 Naples (Dev.). Naples, New York.  
 Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 62, pl. 3, fig. 11.

13770. *Lingula whitei* Walcott. Cotypes.  
 Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 109, pl. 13, fig. 3.

44996. *Lingula whitfieldi* Ulrich. Plastotype.  
 Trenton (Ord.). Covington, Kentucky.  
 Ulrich, Amer. Geol., III, 1889, pp. 378, 381, fig. 3.

45195. *Lingulasma galenensis* Winchell and Schuchert. Plastotypes.  
 Trenton (Ord.). Bear Creek, just south of Hamilton,  
 Fillmore County, Minnesota.  
 Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final  
 Rept., III, Pt. I, 1893, p. 354, pl. 30, figs. 1-4.

45194. *Lingulasma schucherti* Ulrich. Plastotype.  
 Richmond (Ord.). Wilmington, Illinois.  
 Ulrich, Amer. Geol. III, 1889, p. 389, figs. 5, 5a on p. 378.

*Lingulella*. See also *Obolus* (*Lingulella*).

15325. *Lingulella cælata* (Hall). Plesiotype.  
 17439. Lower Cambrian. Troy, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 95, pl. 7, figs.  
 1b, 1d; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 607, pl.  
 67, figs. 1b, 1e.

15319. *Lingulella ella* (Hall and Whitfield). Plesiotype.  
 15321. Lower Cambrian. Chisholm Mine, Ely Mountains, near  
 Pioche, Nevada, and Box Elder Canyon, Utah.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 97, pl. 7, fig. 2;  
 pl. 8, figs. 4-4e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p.  
 607, pl. 67, figs. 2-2e.

See *Lingulepis ella*.

17440. *Lingulella granvillensis* Walcott. Cotype.  
 Lower Cambrian. Washington County, New York.  
 Walcott, Amer. Jour. Sci. (3), XXXIV, 1887, p. 188, pl. 1, figs.  
 15-15c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 607, pl.  
 67, figs. 4-4d.

24587. *Lingulepis cuneolus* Whitfield. Cotypes.  
 Upper Cambrian. Red Canyon Creek, Black Hills, South  
 Dakota.

Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880.  
 p. 336, pl. 2, figs. 5, 6.

= *Obolus* (*Lingulella*) *perattenuatus*.

*Lingulepis dakotensis* Meek and Hayden. See *Lingulepis*  
*niformis*.



15321. *Lingulepis ella* Hall and Whitfield. Holoty  
Middle Cambrian. Canyon above Calls Fort, Wahs  
Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt  
1877, p. 232, pl. 1, fig. 8.  
=*Lingulella ella*.
24552. *Lingulepis mæra* Hall and Whitfield. Coty  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt  
1877, p. 206, pl. 1, figs. 5-7.
24553. *Lingulepis ? minuta* Hall and Whitfield. Coty  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt  
1877, p. 206, pl. 1, figs. 3, 4.  
=*Linnarssonella minuta*.
24589. *Lingulepis perattenuatus* Whitfield. Coty  
Upper Cambrian. Red Canyon Creek, Black Hills, So  
Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1  
p. 337, pl. 2, figs. 7-9.
17860. *Lingulepis pinnaformis* (Owen). Plesioty  
Middle Cambrian. Falls of St. Croix, Wisconsin.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl.  
fig. 2 (figured as *Lingula antiqua* and *L. prima*).
24588. *Lingulepis pinnaformis* (Owen). Plesioty  
Upper Cambrian. Headwaters of Red Canyon Cre  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1  
p. 335, pl. 2, figs. 1-4.
1026. *Lingulepis pinniformis* (Owen). Holotype and paraty  
Upper Cambrian. Central part of Black Hills, So  
Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Kno  
No. 172, XIV, 1864, pp. 2, 3, pl. 1, figs. 1-1b.—Whitf  
Rept. Geol. and Resources Black Hills Dakota, 1880, p.  
pl. 2, figs. 10, 11 (as *L. dakotensis*).  
See *Lingula antiqua*, *L. prima*, and *L. pinnaformis*.
1027. *Lingulepis prima* (Conrad). Plesioty  
Upper Cambrian. Central part of Black Hills, So  
Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Kno  
No. 172, XIV, 1864, p. 3, pl. 1, figs. 2-2b.  
=*Obolella polita*.
45197. *Lingulops granti* Hall and Clarke. Plastoty  
Niagaran (Sil.). Hamilton, Ontario, Canada.  
Hall and Clarke, Nat. Hist. New York, Pal. VIII, Pt. I, 1892,  
19, 173, pl. 4 k, figs. 14, 15.



45196. **Lingulops whitfieldi** Hall. Plastotype.  
Maquoketa (Ord.). Maquoketa Creek, twelve miles north-  
west of Dubuque, Iowa.  
Hall, Twenty-third Rept. New York State Cab. Nat. Hist., 1873,  
pl. 13, figs. 1, 2.
35287. **Linnarssonella girtyi** Walcott. Cotypes.  
Middle Cambrian. Deadwood, Black Hills, South Dakota.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 602
24553. **Linnarssonella minuta** (Hall and Whitfield). Cotypes.  
Upper Cambrian. Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 603.  
See *Lingulepis?* *minuta*.
35288. **Linnarssonella tennesseensis** Walcott. Cotypes.  
35289. Middle Cambrian. Near Knoxville, and near Post Oak  
Springs, Roane County, Tennessee.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 604.
17441. **Linnarssonella sagittalis taconica** (Walcott). Cotypes.  
Lower Cambrian. Washington County, New York.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 610, pl. 68,  
figs. 1-1d; Proc. U. S. Nat. Mus., XXV, 1902, p. 596.  
See *Linnarssonella taconica*.
17441. **Linnarssonella taconia** Walcott. Cotypes.  
Lower Cambrian. Washington County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 189, pl. 1, figs.  
18-18d.  
= *Linnarssonella sagittalis taconica*.
135106. **Liochlamys bulbosa** Heilprin. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 101,  
pl. 7, fig. 10b.
43777. **Lioclema ? araneum** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 431, pl. 75, figs. 9a-9c.
43333. **Lioclema foliatum** Ulrich. Figured sections of holotype.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 301, fig. 1, p. 431.
43209. **Lioclema monroei** Ulrich and Bassler. Holotype and  
figured sections.  
Hamilton (Dev.). Bethany, New York.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 39, pl. 11, figs. 10-12.



43675. **Lioclema punctatum** (Hall). Plesiotype and figured sections.  
 Warsaw (Miss.). Warsaw, Illinois.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 141.
44067. **Lioclema punctatum** (Hall). Plesiotype and figured sections.  
 Keokuk (Miss.). Keokuk, Iowa.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 39, pl. 11, figs. 7-9.
43775. **Lioclema subglobosum** Ulrich. Figured section of holotype.  
 Kinderhook (Miss.). Marshalltown, Iowa.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 428, pl. 75, figs. 8a, 8b.
43774. **Lioclema wachsmuthi** Ulrich. Figured sections of holotype.  
 Kinderhook (Miss.). Marshalltown, Iowa.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 428, pl. 75, figs. 7a, 7b.
43776. **Lioclema wilmingtontense** Ulrich. Figured sections of holotype.  
 Richmond (Ord.). Wilmington, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 426, pl. 34, figs. 4a, 4b.
44063. **Lioclemella ohioensis** (Foerste). Figured sections of plesiotype.  
 Clinton (Sil.). Dayton, Ohio.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 39, pl. 12, figs. 6-9.
20491. **Liopeplum spillmani** (Tuomey). Plesiotype.  
 111800. Ripley (Cret.). Tippah County, Mississippi.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 82, pl. 6, fig. 12.
111801. **Liopeplum subjugosum** (Gabb). Plesiotype.  
 Ripley (Cret.). Tippah County, Mississippi.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 83, pl. 6, fig. 12a.
22898. **Liopistha (Psilomya) concentrica** Stanton. Cotypes.  
 Colorado (Cret.). Huerfano Park, Colorado.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 119, pl. 26, figs. 8-10.
22899. **Liopistha (Psilomya) elongata** Stanton. Cotypes.  
 Colorado (Cret.). Upper Kanab Valley, Utah.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 119, pl. 26, figs. 11, 12.
8647. **Liopistha (Psilomya) meeki** White. Cotypes and  
 22897. plesiotypes.  
 Colorado (Cret.). Paria, and Upper Kanab Valley, Utah.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 118, pl. 26, figs. 5-7.



8647. **Liopistha (Psilomya) meekii** White. Cotypes.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 26; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 186, pl. 18, figs. 14 a, c, d.
187. **Liopistha (Cymella) undata** (Meek and Hayden).  
Holotype and paratype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 236, pl. 39,  
figs. 1a, 1b.  
See *Pholadomya undata*.
8658. **Liopistha (Cymella) undata** (Meek and Hayden).  
Plesiotype.  
Montana (Cret.). Gallinas Creek, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 187, pl. 18, fig. 15a.
1978. **Lioplacodes veternus** (Meek and Hayden). Holotype.  
Jurassic. Head of Wind River, Wyoming.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 116, text fig.—White, Third Ann.  
Rept. U. S. Geol. Surv., 1883, p. 470, pl. 3, fig. 9; Bull. No.  
29, U. S. Geol. Surv., 1886, p. 23, pl. 4, fig. 18.  
See *Melania (Potodoma) veterna*.
8161. **Lioplax endlichi** (White). Cotypes.  
Bear River (Cret.). Seven miles north of Evanston,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 60, pl. 10, figs. 4, 5.  
See *Goniobasis endlichi*.
111937. **Lioplax floridana** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 3,  
pl. 1, fig. 3.
24317. **Liopteria sawkinsi** Clarke. Holotype.  
Middle Devonian. Rio Curua, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 49, text fig.
35178. **Liorhynchus haguei** Girty. Holotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yel-  
lowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 543, pl.  
69, figs. 5a, 5b.
14981. **Liorhynchus (?) hecate** Clarke. Cotypes.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 31, pl. 3, fig. :  
[Probably the same as *Spirifera pluto* Clarke.]



14182. **Liorhynchus quadricostatus** (Vanuxem)? Plesiotypes.  
Lower Carboniferous. White Pine Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 79,  
pl. 3, figs. 9-9b.
46060. **Liospira abrupta** Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 995, pl. 82, figs. 35-38.
45869. **Liospira? angulata** Ulrich. Cotypes.  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1000, pl. 69, figs. 42-46.
45870. **Liospira angustata** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 997, pl. 68, figs. 35-37; pl. 69, figs.  
1, 2.
45871. **Liospira decipiens** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III,  
Pt. II, 1897, p. 998, pl. 82, figs. 39-41.
17902. **Liospira lenticulare** (Sowerby). Plesiotype.  
Trenton (Ord.). Elkader, Turkey River, Iowa.  
Owen, Rep. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 2, fig.  
14 (as *Pleurotomaria* sp. undet.).
45872. **Liospira micula** (Hall). Plesiotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 994, pl. 68, figs. 24-29.
45873. **Liospira modesta** Ulrich and Scofield. Holotype.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 995, pl. 82, figs. 42-44.
45874. **Liospira? mundula** Ulrich. Cotypes.  
Trenton (Ord.). Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 999, pl. 69, figs. 37-41.
45875. **Liospira obtusa** Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 997, pl. 68, figs. 30-34.
45876. **Liospira persimilis** Ulrich. Cotypes.  
Trenton (Ord.). Hartsville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 998, pl. 68, figs. 45-47.



- 45877 **Liospira progne** (Billings). Plesiotypes.  
to Trenton (Ord.). Wykoff, Minnesota, Hartsville, Ten-  
45880. nessee, and Burgin, Kentucky.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 996, pl. 68, figs. 38-44.
45881. **Liospira ? rugata** Ulrich. Holotype.  
Richmond (Ord.). McKinneys, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 999, pl. 69, figs. 33-36.
46061. **Liospira subconcava** Ulrich. Cotypes.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 999, pl. 69, figs. 30-32.
- 45882 **Liospira vitruvia** (Billings). Plesiotypes.  
to Stones River (Ord.). Beloit, Wisconsin, Minneapolis  
45884. and Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 995, pl. 69, figs. 3-5, 7, 8.
35233. **Liostracus parvus** Walcott. Holotype.  
Middle Cambrian. Pebble Creek, Yellowstone National  
Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 463, pl.  
65, fig. 6.
113091. **Liotia (Arene) agenea** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 410, pl. 23, fig. 3.
112575. **Liotia (Arene) coronata** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 409, pl. 17, figs. 2, 2a.
113085. **Liotia (Arene ?) millium** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 409, pl. 18, fig. 4.
112086. **Liotia (Arene) perarmata** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 409, pl. 19, figs. 2, 2b.
107095. **Liotia siderea** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 324, pl. 27, fig. 18.



112576. **Liotia (Arene) solariella** Heilprin. Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 408,  
pl. 17, figs. 1, 1a.
107092. **Liotia veresimilis** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 324, pl. 27, fig. 13.
109314. **Lirodiscus protractus** (Meyer). Plesiotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1484.  
See *Astarte protracta*.
1566. **Lirodiscus wailesii** Dall. Holotype.  
Jacksonian (Eocene). Jackson, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1483,  
pl. 57, fig. 21.
8661. **Lispodesthes lingulifera** White. Cotypes.  
Colorado (Cret.). East of Mount Taylor, one mile south  
of Pajuata, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 192, pl. 18, figs. 2a, b.  
= *Lispodesthes nuptialis*.
8660. **Lispodesthes nuptialis** White. Holotype.  
8661. Colorado (Cret.). Five miles west of Mineral Spring,  
Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 192, pl. 18, figs. 3a, b.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 147, pl. 31, figs. 5, 6.  
See *Anchura nuptialis* and *Lispodesthes lingulifera*.
8076. **Lispodesthes ? obscurata** White. Cotypes.  
Colorado (Cret.). Near Pueblo, Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 30, pl. 11, figs. 7a, 7b.  
= *Pugnellus fosiformis*.
38094. **Lithomylacris augusta** Scudder. Holotype.  
Upper Coal Measures. Port Griffith Switchback, Penn-  
sylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 48, pl. 5, figs.  
2, 3; Foss. Insects N. America, I, 1890, p. 68, pl. 5, figs. 2, 3.
38095. **Lithomylacris pauperata** Scudder. Holotype.  
Upper Coal Measures. Port Griffith Railroad Cut, near  
Pittston, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 409, pl. 32, fig.  
5; Foss. Insects N. America, I, 1890, p. 385, pl. 24, fig. 5.



38096. **Lithomylacris pittstoniana** Scudder. Holotype.  
Upper Coal Measures. Port Griffith, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 50, pl. 5,  
figs. 4, 10; Foss. Insects N. America, I, 1890, p. 70, pl. 5,  
figs. 4, 10.
154369. **Lithophaga nuda** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 800, pl. 11, fig. 7; pl. 35, fig. 27.
8211. **Lithostrotion mamillare** Castelnau. Plesiotype.  
St. Louis (Miss.). Monroe County, Indiana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 159, pl. 40, fig. 6a.  
=Lithostrotion canadense.
24546. **Lithostrotion whitneyi** Meek. Cotypes.  
Upper Carboniferous. Boxelder Peak, Wahsatch Range,  
Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 58,  
pl. 6, figs. 1-1c.
8480. **Lithostrotion whitneyi** Meek. Plesiotypes.  
Upper Carboniferous. Fossil Hill, White Pine County,  
Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 103, pl. 6, figs. 1a-1c.
5119. **Lithotrochus andii** (d'Orbigny). Plesiotypes.  
Jurassic. Coquimbo, Chile, and San Felipe, Peru.  
Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 283,  
pl. 41, fig. 3.
9285. **Lophophyllum expansum** White. Holotype.  
Keokuk (Miss.). Henry County, Iowa.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 27; Twelfth Ann.  
Rept. U. S. Geol. Surv. Terr., 1883, p. 157, pl. 39, figs. 4a, 4b.
6552. **Lophophyllum proliferum** (McChesney). Plesiotypes.  
8500. Upper Carboniferous. Nebraska City, Nebraska; Spring-  
field, Illinois.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 144,  
pl. 5, figs. 4a, 4b.—White, Rept. U. S. Geogr. Surv., W. 100th  
Merid., IV, Pt. I, 1877, p. 101, pl. 6, fig. 4e.
8499. **Lophophyllum proliferum sauridens** White. Cotypes.  
Upper Carboniferous. Near Santa Fe, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 101, pl. 6, figs. 4a-4d.
45885. **Lophospira abnormis** Ulrich. Cotypes.  
Trenton (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1897, p. 974, pl. 73, figs. 36-40.



45886. *Lophospira acuminata* Ulrich and Scofield. Holotype.  
Richmond (Ord.). Near Richmond, Indiana.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 973, pl. 73, fig. 8.
45887. *Lophospira ampla* Ulrich. Cotypes.  
45888. Richmond (Ord.). Boyle County, Kentucky; Richmond, Indiana (Newport, Kentucky, in error).  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 981, pl. 73, figs. 52-54.
45889. *Lophospira augustina* (Billings). Plesiotype.  
Trenton (Ord.). Stewartsville, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 987, pl. 71, figs. 1, 2.
45890. *Lophospira augustina minnesotensis* Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Stewartsville, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 988, pl. 71, figs. 3, 4.
46062. *Lophospira bicincta* (Hall). Plesiotypes.  
47611. Stones River (Ord.). Murfreesboro, Tennessee, Beloit,  
47612. Wisconsin, and Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 964, pl. 72, figs. 1-3.
45891. *Lophospira bowdeni* (Safford). Plesiotypes.  
Richmond (Ord.). Boyle County, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 986, pl. 72, figs. 40-43.
46063. *Lophospira centralis* Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 970, pl. 73, fig. 9.
45892. *Lophospira concinnula* Ulrich and Scofield. Cotypes.  
45893. Black River (Ord.). Cannon Falls and St. Paul, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 966, pl. 72, figs. 16-19.
45894. *Lophospira conoidea* Ulrich. Holotype.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 976, pl. 73, fig. 22.
45895. *Lophospira conradana* Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 972, pl. 72, figs. 29-32.



45896. **Lophospira decursa** Ulrich. Holotype.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 975, pl. 73, fig. 10.
45897. **Lophospira elevata** Ulrich and Scofield. Cotypes.  
45898. Trenton (Ord.). Kenyon, Minnesota, and near Burgin,  
Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 977, pl. 73, figs. 11, 13, 14.
45899. **Lophospira fillmorensis** Ulrich and Scofield. Cotypes.  
45900. Trenton (Ord.). Wykoff and near Fountain, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept. III, Pt. II, 1897, p. 967, pl. 72, figs. 20-24.
45901. **Lophospira helicteres wisconsinensis** Ulrich and Scofield. Cotypes.  
45902. Stones River (Ord.). Beloit, Wisconsin; Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept. III, Pt. II, 1897, p. 971, pl. 72, figs. 25, 26, 28.
45903. **Lophospira humilis** Ulrich. Cotypes.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 968, pl. 72, figs. 12-15.
46064. **Lophospira? knoxvillensis** Ulrich. Cotypes.  
Stones River (Ord.). Near Knoxville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 889, pl. 65, figs. 38-40.
45904. **Lophospira (Seelya?) lirata** Ulrich. Holotype.  
Utica (Ord.). Newport, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 988, pl. 72, figs. 56, 57.
45905. **Lophospira (Seelya?) lirata obsoleta** Ulrich. Holotype.  
Utica (Ord.). Newport, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 988, pl. 72, figs. 58, 59.
45906. **Lophospira medialis** Ulrich and Scofield. Cotypes.  
45907. Trenton (Ord.). Near Burgin, Kentucky; Middle Ten-  
nessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 973, pl. 73, figs. 23-29.
45908. **Lophospira medialis burginensis** Ulrich. Cotypes.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I  
1897, p. 974, pl. 73, figs. 30-31.



45909. **Lophospira ? notabilis** Ulrich. Holotype  
Black River (Ord.). Central Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 990, pl. 72, figs. 33-35.
45910. **Lophospira obliqua** Ulrich and Scofield. Cotype  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 967, pl. 72, figs. 6-8.
45911. **Lophospira oweni** Ulrich and Scofield. Cotype  
45912. Black River (Ord.). Chatfield and near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 980, pl. 73, figs. 41-45.
46065. **Lophospira peracuta** Ulrich and Scofield. Cotype  
46066. Black River (Ord.). St. Paul, Minnesota.  
Stones River, (Ord.). Lebanon, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 976, pl. 73, figs. 15-17.
46067. **Lophospira perangulata** (Hall). Plesiotype  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 972, pl. 73, figs. 1-7.
45913. **Lophospira perforata** Ulrich and Scofield. Cotype  
45914. Trenton (Ord.). Jo Daviess County and Carroll County, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 984, pl. 73, figs. 32-35.
45915. **Lophospira perlamellosa** Ulrich. Holotype  
Richmond (Ord.). Hanover, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 985, pl. 73, figs. 55, 56.
46068. **Lophospira procera** Ulrich. Holotype  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 968, pl. 72, fig. 9.
45916. **Lophospira producta** Ulrich. Holotype  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 975, pl. 73, fig. 21.
45917. **Lophospira pulchella** Ulrich and Scofield. Cotype  
45918. Trenton (Ord.). Burgin, Kentucky.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 982, pl. 73, figs. 46-48.



45919. **Lophospira quadrisulcata** Ulrich and Scofield. Holotype.  
Richmond (Ord.). Two miles east of Spring Valley,  
Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 967, pl. 72, figs. 10, 11.
45920. **Lophospira saffordi** Ulrich. Cotypes.  
45921. Trenton (Ord.). Lindsleys Hill, near Lebanon, and  
Davidson County, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 982, pl. 73, figs. 49-51.
- 45922 **Lophospira serrulata** (Salter). Plesiotypes.  
to Stones River (Ord.). Dixon, Illinois; Minneapolis, Min-  
45925. nesota; Beloit and Janesville, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 968, pl. 72, figs. 51-55; pl. 73,  
fig. 57.
45926. **Lophospira spironema** Ulrich and Scofield. Cotypes.  
45927. Black River (Ord.). Chatfield and Cannon Falls, Min-  
nesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 983, pl. 72, figs. 44-47.
45928. **Lophospira sumnerensis** (Safford). Cotypes and  
plesiotypes.  
Trenton (Ord.). Sumner County, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 978, pl. 73, figs. 18-20.  
See *Murchisonia sumnerensis*.
45929. **Lophospira tenuistriata** Ulrich. Cotypes.  
Utica (Ord.). Newport, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 983, pl. 72, figs. 48-50.
46069. **Lophospira trochonemoides** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 990, pl. 65, figs. 41-44.
- 45930 **Lophospira tropidophora** (Meek). Plesiotypes.  
to Lorraine (Ord.). Newport, Kentucky.  
45932. Richmond (Ord.). Hanover, Ohio; Madison, Indiana.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 978, pl. 72, figs. 36-39.
13951. **Loxonema approximatum** Walcott. Holotype.  
Middle Devonian. Atrypa Peak, Eureka District, Nevada  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 191, pl. 6, figs.
14410. **Loxonema bella** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 258, pl. 24, figs. 1, 1a.



344. *Lucina occidentalis ventricosa* (Meek and Hayden). Holotype and paratype.  
Fort Pierre or Fox Hills (Cret.). Yellowstone River,  
near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 135, pl. 17, figs.  
3a, 3b.
23056. *Lucina ovalis* Stanton. Holotype and paratype.  
Knoxville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 59,  
pl. 12, fig. 1.
107101. *Lucina pauperata* Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 326, pl. 30, fig. 3.
107392. *Lucina plesiophtha* Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 40,  
figs. 2, 5.  
= *Phacoides* (*Lucinisca*) *plesiophus*.
8362. *Lucina profunda* White. Cotypes.  
Montana (Cret.). Monument Creek, Colorado.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 158; IV, 1881, p. 138,  
pl. figs. 5, 6.
135858. *Lucina santarosana* Dall. Holotype.  
Upper Oligocene. Oak Grove, Santa Rosa County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1354, pl. 51, fig. 6.
8644. *Lucina subundata* Hall and Meek. Plesiotypes.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 184, pl. 18, fig. 12a.
345. *Lucina subundata* Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Mouth of Sage Creek, on Cheyenne  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 133, pl. 17, figs.  
2, 2a-e.
22879. *Lucina subundata* Hall and Meek. Plesiotypes.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 97, pl. 22, figs.  
5-6.
12252. *Lucina* (*Diplodonta*?) *subundata* Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek.  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 411, pl. 11, figs. 17, 18.



107103. **Lucina textilis** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 326, pl. 30, fig. 1.
21728. **Lucina? townsendi** White. Holotype.  
Lower Cretaceous. Islands of St. Paul and St. Peter,  
Straits of Magellan, South America.  
White, Proc. U. S. Nat. Mus., XIII, 1890, p. 14, pl. 3, figs. 1, 2.
108971. **Lucina turneri** Stanton. Cotypes.  
Lower Tejon (Eocene). One mile southeast of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1042, pl. 65, figs. 6, 7.
12260. **Lucina ventricosa** Hall and Meek. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 410, pl. 11, figs. 14-16.
264. **Lunatia concinna** (Hall and Meek). Plesiotypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 314, pl. 32,  
figs. 11a-c.  
See *Natica moreauensis*.
12250. **Lunatia concinna** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 430, pl. 12, fig. 13.
22911. **Lunatia concinna** (Hall and Meek). Plesiotypes.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 134, pl. 29,  
figs. 9, 10.
157833. **Lunatia hornii** Gabb. Plesiotype.  
Lower Tejon (Eocene). One mile southeast of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1044, pl. 66, fig. 4.
290. **Lunatia occidentalis** (Meek and Hayden). Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 315, pl. 3,  
figs. 12a-c.  
See *Natica occidentalis*.



265. **Lunatia subcrassa** (Meek and Hayden). Holotype and  
paratype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 316, pl. 39,  
fig. 3a-c.  
See *Natica subcrassa*.
13322. **Lutraria transmontana** Conrad. Holotype.  
Miocene. Ranch Triumpho, Los Angeles, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific  
Ocean, VII, 1857, p. 194, pl. 5, fig. 6.
1848. **Lutraria? traskei** Conrad. Holotype.  
Miocene. Carmello, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific  
Ocean, V, 1856, p. 324, pl. 3, fig. 23.
163603. **Lyonsia acuta** Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1514, pl. 57, fig. 24.
1023. **Lyonsia (Penopæa) concava** Meek and Hayden. Cotypes.  
Upper Carboniferous. Region of Nemaha, Nebraska.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 82.  
= *Sedgwickia? concava*.
8181. **Lyosoma powelli** White. Cotypes.  
Jurassic. Thistle Creek, Spanish Fork Canyon, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 153, pl. 38, figs. 6a-d.
86941. **Lyria costata** (Sowerby). Plesiotypes.  
111846. Upper Eocene. Red Bluff, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 85,  
pl. 6, fig. 2.
112109. **Lyria pulchella** (Sowerby). Plesiotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 84,  
pl. 4, fig. 3.
46214. **Lyrodesma acuminatum** Ulrich. Cotypes.  
46215. Black River (Ord.). Thirteen miles south and six miles  
south of Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 609, pl. 42, figs. 1, 2, 5.
46216. **Lyrodesma acuminatum intermedium** Ulrich.  
46217. Cotypes.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 609, pl. 42, figs. 3, 4; p. 611, fig. 45h.



46218. **Lyrodesma cannonense** Ulrich. Cotypes.  
 46219. Trenton (Ord.). Near Caunon Falls and St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 610, pl. 42, figs. 6-8.
46220. **Lyrodesma conradi** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 684, pl. 47, fig. 9.
46221. **Lyrodesma grande** Ulrich. Holotype.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 683, pl. 50, fig. 13.
46222. **Lyrodesma inornatum** Ulrich. Cotypes.  
 Lorraine (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 682, pl. 50, figs. 10-12.
46224. **Lyrodesma major** (Ulrich). Plesiotypes.  
 Richmond (Ord.). Clarksville, Ohio.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 611, figs. 45 a-g.  
 See *Clidophorus major*.
46225. **Lyrodesma subplanum** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 683, pl. 47, fig. 8.
44082. **Lyropora divergens** Ulrich. Cotypes.  
 44083. Chester (Miss.). Chester, Illinois, and Sloans Valley, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 584, pl. 58, figs. 4b, 4d.
43334. **Lyropora ovalis** Ulrich. Holotype.  
 Chester (Miss.). Litchfield, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 585, pl. 58, figs. 5-5b; pl. 55, fig. 8.
43773. **Lyropora quincuncialis** Hall. Figured sections of plesiotypes.  
 Chester (Miss.). Sloans Valley, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 583, pl. 55, figs. 7-7c.
44086. **Lyropora ranosculum** Ulrich. Cotypes.  
 Chester (Miss.). Sloans Valley, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 581, pl. 58, figs. 1-1c.
43771. **Lyropora subquadrans** Hall. Cot  
 43772. Chester (Miss.). Chester, Illinois, and Sloans Valley, Kentucky.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 582, pl. 58, figs. 2, 2b, 2d



20115. **Lysis oppansus** White. **Holotype.**  
Chico (Cret.). Near Pence's Ranch, Butte County,  
California.  
White Bull. No. 51, U. S. Geol. Surv., 1889, p. 17, pl. 4, figs. 14, 15.
23085. **Lytoceras batesi** (Trask). **Plesiotype.**  
23086. Knoxville (Lower Cret.). Three and six miles north of  
Paskenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, (Feb., 1896), p.  
75, pl. 13, figs. 9-11.
17338. **Maclurea annulata** Walcott. **Cotype.**  
17339. Upper Pogonip (Ord.). White Mountain, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 81, pl. 11, figs.  
19, 19a.
45933. **Maclurea bigsbyi** Hall. **Plesiotype.**  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1039, pl. 75, fig. 10.
45934. **Maclurea bigsbyi dixonensis** Ulrich. **Holotype.**  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 1039.
17342. **Maclurea carinata** Walcott. **Cotypes.**  
Upper Pogonip (Ord.). Lone Mountain, near Eureka,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 82, pl. 11, figs.  
20, 20a.
45935. **Maclurea crassa** Ulrich and Scofield. **Cotype.**  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1040, pl. 75, fig. 14.
45936. **Maclurea crassa macra** Ulrich and Scofield. **Holotype.**  
Trenton (Ord.). Hader, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1040, pl. 75, figs. 15, 16.
45937. **Maclurea depressa** Ulrich and Scofield. **Cotype.**  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1040, pl. 75, fig. 1.
45938. **Maclurea knoxvillensis** Ulrich. **Cotype.**  
Trenton? (Ord.). Knoxville, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1039.



17352. **Maclurea minima** Hall and Whitfield. Cotypes.  
Pogonip (Ord.). Ute Peak, Wasatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 235, pl. 1, figs. 17-19.
17346. **Maclurea subannulata** Walcott. Cotypes.  
Upper Pogonip (Ord.). White Mountain, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 82, pl. 11, figs.  
18-18b.
45939. **Maclurina cuneata** (Whitfield). Plesiotype.  
Trenton (Ord.). Olmsted County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept. III, Pt. II, 1897, p. 1042, pl. 82, fig. 46.
45940. **Maclurina manitobensis** (Whiteaves). Plesiotypes.  
Trenton (Ord.). Olmsted County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1041, pl. 82, fig. 45.
45941. **Maclurina subrotunda** (Whitfield). Plesiotype.  
Trenton (Ord.). Stewartsville, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1043.
114860. **Macoma alumensis** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1049,  
pl. 47, fig. 8.
114669. **Macoma ? calhounensis** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1046,  
pl. 47, fig. 10.
144475. **Macoma conradi** Dall. Holotype.  
Miocene. Temple Place, York River, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1048,  
pl. 47, fig. 3.
115044. **Macoma (Psammacoma?) holmesii** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1054,  
pl. 47, fig. 4.
157906. **Macoma irma** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1047, pl. 46, fig. 15.
147690. **Macoma kelseyi** Dall. Holotype.  
Pleistocene. City Park, San Diego, California.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1  
p. 1052, pl. 49, fig. 7.



157916. **Macoma laxa** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1050, pl. 47, fig. 10.
107331. **Macoma lyelli** Dall. Cotypes.  
108795. Miocene. Gay Head, Marthas Vineyard, Massachusetts.  
Dall, Amer. Journ. Sci. (3), XLVIII, 1894, p. 298; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1049, pl. 37, figs. 9-11.
135708. **Macoma (Psammacoma) olivella** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1054, pl. 47, fig. 20.
6086. **Macoma (Psammacoma) tageliformis** Dall. Cotypes.  
Pleistocene. Corpus Christi, Texas.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1055.
135702. **Macoma (Psammacoma) tracta** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1053, pl. 47, fig. 13.
135695. **Macoma (Cymatoica) vendryesi** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1056, pl. 46, fig. 3.
114631. **Macrocallista acuminata** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Chattahoochee River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1255, pl. 57, fig. 3.
164889. **Macrocallista (Chionella?) gilberti** Dall. Holotype.  
Eocene. Chichagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV., 1904, p. 107, pl. 9, fig. 10.
107396. **Macrocallista pittsburgensis** (Dall). Cotypes.  
Tejon (Eocene). Pittsburg, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1253.  
See Meretrix (*Callista*) *pittsburgensis*.
8477. **Macrocheilus anguliferus** White. Cotypes.  
Upper Carboniferous. Camp Cottonwood, Spring Moun-  
tain Range, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 22; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 160, pl. 12, figs. 3a-3c, 3e, 3f.



6593. **Macrocheilus intercalaris pulchellus** Meek and Worthen. Plesiotype.  
Upper Carboniferous. Two and one-half miles southwest  
of Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 228, pl. 6, fig. 8.  
= *Sphærodoma intercalaris*.
1974. **Macrocyclus spatiosa** (Meek and Hayden). Holotype.  
Wind River (Eocene). Wind River Valley, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 594, pl. 42,  
figs. 9a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 452, pl. 30, figs. 1-3.  
See *Helix spatiosa*.
14381. **Macrodon hamiltonæ** Hall. Plesiotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 243, pl. 23, figs.  
5-5c.
7588. **Macrodon obsoletus** Meek. Cotypes.  
Upper Carboniferous. Monongalia County, West Vir-  
ginia.  
Meek, Third Rept. Regents West Virginia University, 1870-71,  
p. 71.
6522. **Macrodon tenuistriata** Meek and Worthen. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 207, pl. 10, figs. 20a-20b.
14382. **Macrodon truncatus** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 243, pl. 8, fig. 2.
114430. **Macromphalia (Gyrodisca) duplinensis** (Dall). Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 60, fig. 4.  
See *Gyrodes (Gyrodisca) duplinensis* and *Gyrodisca  
duplinensis*.
41848. **Macronotella scofieldi** Ulrich. Cotypes.  
41849. Stones River (Ord.). High Bridge, Kentucky; Cannon  
Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 684, pl. 43, figs. 30-34.
153773. **Mactra albirupina** Harris. Cotype.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p.  
pl. 6, fig. 2.



192. **Mastra alta** Meek and Hayden. Holotype and paratype.  
Fox Hills (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 271.
192. **Mastra (Cymbophora) alta** (Meek and Hayden). Holotype and paratype.  
2007. Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 210, pl. 37, figs. 2a, 2b.
7853. **Mastra (Trigonella) arenaria** Meek. Cotypes.  
Montana (Cret.). Red Creek, Uinta Mountains, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 154, pl. 14, fig. 5.
7844. **Mastra ? canonensis** Meek. Holotype.  
Fort Pierre (Cret.). Canyon City, Colorado.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 308.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 297, pl. 9, figs. 11a-c.
114650. **Mastra chipolana** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 892, pl. 27, fig. 19.
107615. **Mastra (Mactrotoma) cymata** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 893, pl. 33, fig. 23.
112271. **Mastra (Mactrella ?) darienensis** Dall. Holotype.  
Eocene. Vamos-Vamos Station, Panama Canal, Darien.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 895.
12525. **Mastra ? emmonsi** Meek. Cotypes.  
Colorado (Cret.). East Canyon Creek, Wasatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 153, pl. 15, fig. 8.
22902. **Mastra emmonsi** Meek. Plesiotypes.  
22903. Colorado (Cret.). Huerfano Park, Colorado, and Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 121, pl. 27, figs. 9-13.
177. **Mastra (Cymbophora ?) formosa** (Meek and Hayden). Cotypes.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 207, pl. 39, fig. 7.
177. **Mastra formosa** Meek and Hayden. Cotypes.  
Fox Hills (Cret.). Near mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 271.



13310. **Macra ? gaviotensis** Conrad. Holotype.  
Miocene. Gaviote Pass, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 194, pl. 7, fig. 4.
297. **Macra gracilis** Meek and Hayden. Holotype and paratypes.  
Montana (Cret.). Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 179.
297. **Macra (Cymbophora ?) gracilis** (Meek and Hayden).  
Holotype and paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 209, pl. 17, figs.  
18a, 18b.
7840. **Macra ? holmesii** (Meek). Holotype, paratypes, and  
8088. plesiotypes.  
Fox Hills (Cret.). About four miles north of Golden  
City, and near Canyon City, Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 295,  
pl. 6, figs. 5a, 5b, 4a, 4b.  
See *Cyrena holmesii*.
22904. **Macra huerfanensis** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 122, pl. 27,  
figs. 14, 15.
8636. **Macra ? incompta** White. Holotype.  
Colorado (Cret.). Five miles above Pueblo, Colorado.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 185, pl. 17, figs. 6a, b.
1913. **Macra (Cymbophora ?) nitidula** (Meek and Hayden).  
Holotype and paratype.  
Fox Hills (Cret.). Deer Creek, near North Platte,  
Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 211, pl. 30, figs.  
6a-c.  
See *Tellina nitidula*.
207. **Macra siouxensis** Meek and Hayden. Cotypes and  
plastotypes.  
Dakota (Cret.). Big Sioux River, two miles above its  
mouth, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. ---  
= *Macra (Cymbophora ?) siouxensis*.



217. *Mastra* (*Cymbophora*?) *siouxensis* (Meek and Hayden).

Cotypes and plastotypes.

Dakota (Cret.). Big Sioux River, two miles above its mouth, South Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 206, pl. 1, figs. 7b, 7c.

See *Mastra siouxensis*.

9855. *Mastra texana* Conrad.

Cotypes.

Locene? Prairie between Laredo and Rio Grande City, Texas.

Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pl. II, 1857, p. 148, pl. 4, figs. 1a, 1b.

153742. *Mastra* (*Macrotroma*) *undula* Dall.

Holotype.

Phaeene. Near Darlington Court House, South Carolina.

Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1896, p. 148, pl. 28, fig. 12.

- 2184 *Mastra* *Cymbophora*? *utahensis* Meek

Cotypes.

153741 *Cret.* East Canyon Creek, Wahsatch Range, and near Clatsville, Utah.

Meek, Rept. U. S. Geol. Surv. Terr., IX, Pl. I, 1876, p. 135, fig. 12, and *Utahensis* Meek, Rept. U. S. Geol. Surv. Terr., IX, Pl. I, 1876, p. 135, fig. 12.

- 22 *Mastra warreniana* Meek and Hayden

Holotype

and plastotypes

Box Hills, Cret. Missouri River South Dakota

Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1881, p. 10.

- 22 *Mastra Cymbophora*? *warreniana* Meek and Hayden

Holotype and plastotypes

Box Hills, Cret. Missouri River South Dakota

Meek, Rept. U. S. Geol. Surv. Terr., IX, Pl. I, 1876, p. 135, fig. 12.

- 153743 *Mastra Macrotroma warreniana* Dall

Holotype

Phaeene Missouri River Florida

Dall, Trans. Wagner Free Inst. Sci. Phila., II, Pl. IV, 1896, p. 148, pl. 28, fig. 12.

- 153744 *Macrotroma macrotroma* Say

Holotype

Box Hills, Missouri River South Dakota

Say, Proc. Acad. Nat. Sci. Phila., 1823, p. 10, fig. 12.

- 153745 *Macrotroma macrotroma* Say

Holotype

Box Hills, Missouri River South Dakota

Say, Proc. Acad. Nat. Sci. Phila., 1823, p. 10, fig. 12.



158272. **Madracis gregorioi** Vaughan. Cotypes.  
Chickasawan (Eocene). Gregg's Landing, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 130, pl. 13,  
figs. 12, 12a.
3585. **Mæonia axinia** Dana. Cotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 696, Atlas, pl. 5,  
figs. 5a-d.
25640. **Mæonia?** **carinata** (Morris). Plesiotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 696, Atlas, pl. 6,  
figs. 1a, 1b.
3583. **Mæonia (Pyramia) elliptica** Dana. Cotypes.  
3583a. Carboniferous. Harpers Hill on the Hunter, and Wol-  
longong Point, Illawarra, New South Wales, Aus-  
tralia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 697, Atlas, pl. 6,  
figs. 5a-c, 6, 6a.
3584. **Mæonia elongata** Dana. Holotype.  
Carboniferous. Black Head, Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 695, Atlas, pl. 5,  
figs. 3a-c.
4639. **Mæonia fragilis** Dana. Holotype.  
Carboniferous. Glendon on the Hunter, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 696, Atlas, pl. 6,  
fig. 3.
25639. **Mæonia (Cleobis) gigas** (McCoy). Plesiotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 697.
3637. **Mæonia (Cleobis) gracilis** Dana. Cotypes.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 698, Atlas, pl. 7,  
figs. 1a-c.
3638. **Mæonia (Cleobis) grandis** Dana. Cotypes.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 697, Atlas,  
figs. 7, 7a, 8, 8a.



3887. *Maonia Pyramia myiformis* Dana. Co  
 Crustaceans. Wellington Port. New Zealand. New  
 Wales. Australia.  
 Dana. *Trans. U. S. Nat. Mus.* X 1865. p. 397. Plate  
 fig. 24-25.
3888. *Maonia? recta* Dana. Ho  
 Crustaceans. Wellington Port. New Zealand. New  
 Wales. Australia.  
 Dana. *Trans. U. S. Nat. Mus.* X 1865. p. 397. Plate  
 fig. 26.
3889. *Maonia valida* Dana. Ho  
 Crustaceans. Black Head. New Zealand. New South  
 Wales. Australia.  
 Dana. *Trans. U. S. Nat. Mus.* X 1865. p. 396. Plate  
 fig. 27-28.
3890. *Maia canura* Guppy. Ho  
 3891. *Maia*. Jamaica and Barb. West Indies.  
 Guppy. *Ann. Mag. Nat. Hist. London* XIII 1866. p.  
 17. fig. 2.
3892. *Mangilia Cythara branneri* Arnold. Ho  
 Pleistocene. Termination Island. off San Pedro. Calif.  
 Arnold. *Mem. Calif. Acad. Sci.* III 1895. p. 222. pl. 5. f.
3893. *Mangilia consentanea* Guppy. Ho  
 Crustaceans. Barbados. Jamaica. West Indies.  
 Guppy. *Proc. U. S. Nat. Mus.* XIX 1891. p. 307. pl. 17.
3894. *Mangilia hooveri* Arnold. Ho  
 Pleistocene. San Pedro. California.  
 Arnold. *Mem. Calif. Acad. Sci.* III 1895. p. 222. pl. 5. f.
3895. *Mangilia interrossa pedroana* Arnold. Ho  
 Pleistocene. Termination Island. off San Pedro. Calif.  
 Arnold. *Mem. Calif. Acad. Sci.* III 1895. p. 225. pl. 5. f.
3896. *Mangilia micropicta* Guppy. Ho  
 Pleistocene. Mirra. Trinidad. British West Indies.  
 Guppy. *Ann. Mag. Nat. Hist. London* Dec. II 1874. p. 400. pl. 1.
3897. *Mangilia pinneri* Arnold. Ho  
 Pleistocene. Termination Island. off San Pedro. Calif.  
 Arnold. *Mem. Calif. Acad. Sci.* III 1895. p. 224. pl. 5. f.
3898. *Mangilia Taranis strongi* Arnold. Ho  
 Pleistocene. Termination Island. off San Pedro. Calif.  
 Arnold. *Mem. Calif. Acad. Sci.* III 1895. p. 225. pl. 5. f.



7903. **Margarita mudgeana** (Meek). Holotype.  
Mentor (Cret.). Twelve miles southwest of Salina,  
Kansas.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 300, pl. 2, fig. 9b.  
See *Turbo mudgeanus*.
294. **Margarita nebrascensis** (Meek and Hayden). Holotype  
415. and paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana, and Long Lake, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 298, pl. 19, figs.  
8a, 8b, 9a, 9b.  
See *Turbo nebrascensis*.
162539. **Margarita optabilis knechti** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 332, pl. 5, fig. 14.
162540. **Margarita optabilis nodosa** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 332, pl. 5, fig. 13.
162538. **Margarita parcipicta pedroana** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 333, pl. 5, fig. 16.
112573. **Margarita tampaensis** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 406, pl. 18, fig. 5.
7719. **Margaritana nebrascensis** Meek and Hayden. Holotype  
and paratype.  
Dakota (Cret.). Opposite Sioux City, on Missouri River  
in Nebraska.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 114, pl. 1, figs.  
5a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 427,  
pl. 4, figs. 1, 2.  
See *Unio* (*Baphia*?) *nebrascensis*.
286. **Margaritella flexistriata** (Evans and Shumard). Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near mouth of Sage  
Creek, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 302, pl. 19,  
figs. 11, 11a-d.
164899. **Margarites peninsularis** Dall. Holotype.  
Eocene. Chicagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 110, pl. 9, fig. 6



97377. **Marginella (Volutella) amiantula** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 56,  
pl. 5, fig. 9.
113773. **Marginella amina** Dall. Holotype.  
Oligocene. Potrero, Rio Amina, Santo Domingo, West  
Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 309, pl. 29, fig. 15.
97362. **Marginella (apicina var.?) pardalis** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 49,  
pl. 5, fig. 2.
107141. **Marginella (Persicula) arcuata** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 308, pl. 29, fig. 13.
97498. **Marginella aurora** Dall. Holotype.  
Miocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 51,  
pl. 6, fig. 4a.
112096. **Marginella ballista** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 47,  
pl. 4, fig. 6.
112097. **Marginella (ballista var.?) tampæ** Dall. Cotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 47.
97371. **Marginella bella** (Conrad). Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 53,  
pl. 4, fig. 9a.
112100. **Marginella bella bellula** Dall. Cotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 53,  
pl. 4, fig. 8e.
112101. **Marginella bella inepta** Dall. Cotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 53,  
pl. 4, fig. 8d.
112319. **Marginella (Volutella) dacria** Dall. Holotype.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 226, pl. 14, fig. 5.



97369. **Marginella denticulata** Conrad. Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 51, pl. 5, fig. 8.
113683. **Marginella domingoensis** Dall. Cotypes.  
113768. Oligocene. Island in Lake Henriquillo, Santo Domingo,  
West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 310.
112104. **Marginella elegantula** Dall. Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 54, pl. 4, fig. 7.
113200. **Marginella eulima** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 225, pl. 13, fig. 10.
112103. **Marginella faunula** Dall. Cotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 53,  
pl. 4, fig. 9b.
97363. **Marginella floridana** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 49,  
pl. 5, fig. 6.
97375. **Marginella gravida** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 55,  
pl. 5, fig. 3.
113740. **Marginella latissima** Dall. Holotype.  
Pliocene. Moen, Costa Rica.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 308, pl. 29, fig. 11.
107076. **Marginella limonensis** Dall. Holotype.  
Pliocene. Limon, Costa Rica, Central America.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 309, pl. 29, fig. 12.
112105. **Marginella newmani** Dall. Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 54, pl. 4, fig. 8.
113201. **Marginella onchidella** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 226, pl. 13, fig. 7.



97360. **Marginella precursor** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 47,  
pl. 5, fig. 4.
107139. **Marginella solitaria** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 308, pl. 29, fig. 14.
97374. **Marginella styria** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 54,  
pl. 5, fig. 1.
97367. **Marginella willcoxiana** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 50,  
pl. 5, fig. 7.
35328. **Marginifera haydenensis** Girty. Holotype and paratypes.  
Upper Carboniferous. Near Grand River, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 380, pl. 5, figs.  
9-9c, 10-10b, 11-11a.
35329. **Marginifera ingrata** Girty. Cotypes.  
35330. Weber (Upper Carb.). Little Ella Hill and Horseshoe  
Gulch, Leadville district, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 379, pl. 5, figs.  
12, 12a, 13, 13b.
35323. **Marginifera lasallensis** Worthen? Plesiotype.  
Weber (Upper Carb.). Gulch, Crested Butte quadrangle,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 372, pl. 5, figs.  
4, 4a.
35324. **Marginifera muricata** Norwood and Pratten. Plesiotypes.  
35326. Maroon (Upper Carb.). Cement Creek, Crested Butte  
35327. quadrangle; Rock Creek, and southeast of Italian  
Peak, Elk Mountain Region, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 373, pl. 5, figs.  
5, 5b, 6, 6b, 7.
35325. **Marginifera wabashensis** Norwood and Pratten var. Plesiotype.  
Hermosa (Upper Carb.). Silver Creek, San Juan Region,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 375, pl. 5, figs.  
8, 8a.
40893. **Mariacrinus carleyi** (Hall). Plesiotype.  
Waldron (Sil.). Waldron, Indiana.  
Wachsmuth and Springer, N. A. Crinoidea Camerata, Mem. Mus.  
Comp. Zool., XXI, 1897, p. 282, pl. 22, figs. 2a-c.



455. **Martesia cuneata** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 259, pl. 30,  
figs. 8a, 8b.  
See *Pholas cuneata*.
145869. **Martesia ? ovalis** Dall. Holotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
820, pl. 36, fig. 5.
35186. **Martinia rostrata** Girty. Cotypes.  
Madison (Miss.). Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 553, pl. 70,  
figs. 5a-f.
46226. **Matheria rugosa** Ulrich. Holotype.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 241, fig. 26; Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1894, p. 563, pl. 36, figs. 29, 30.
115436. **Mathilda plexita** Dall. Holotype.  
Oligocene. Jamaica, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 320, pl. 29, fig. 5.
24598. **Matthevia variabilis** Walcott. Cotypes.  
Upper Cambrian. One mile northwest of Saratoga Springs,  
New York.  
Walcott, Amer. Journ. Sci. (3), XXX, 1885, p. 18, figs. 1-6, on  
p. 20.
114547. **Mazzalina costata** Dall. Cotypes.  
135102. Oligocene. Near Baileys Ferry, Chipola River, and White  
Beach, Little Sarasota Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 106.
135131. **Mazzalina dalli** Harris. Holotype.  
Eocene. Vincennes Bluff, Saline River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 166,  
pl. 7, fig. 7.
135154. **Mazzalina inaurata** (Conrad). Plesiotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 164,  
pl. 7, fig. 6.
135130. **Mazzalina inaurata humerosa** Harris. Holotype.  
Eocene. Well at Rison, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 165,  
pl. 7, fig. 4.



135129. **Mazzalina inaurata oweni** (Dall). Plesiotype.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 165,  
pl. 7, fig. 1.
135103. **Mazzalina oweni** Dall. Cotypes.  
Middle Eocene. White Bluff, Jefferson County, Arkansas.  
Owen, Second Geol. Rept. Arkansas, 1860, p. 35, pl. 9, fig. 1 (as  
*Fusus* sp.).—Dall, Trans. Wagner Free Inst. Sci. Phila., III,  
Pt. I, 1890, p. 105; *ibid.*, Pt. II, 1892, p. 233.
21714. **Medlicottia copei** White. Cotype.  
Permian. Military crossing of the Big Wichita, Baylor  
County, Texas.  
White, Amer. Nat., XXIII, 1889, p. 117, pl. 1, figs. 1-3; Bull.  
No. 77, U. S. Geol. Surv., 1891, p. 19, pl. 2, figs. 1-3.—Smith,  
Mon. XLII, U. S. Geol. Surv., 1903, p. 48, pl. 22, figs. 1-3.
14929. **Medusina costata** (Torell). Plesiotype.  
23891. Lower Cambrian. Lugnas, Sweden.  
Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 49, pl. 28, figs.  
3-3b, 4; pl. 29, fig. 2.  
See *Medusites lindströmi*.
26099. **Medusina deperdita** Beyrich. Plastotype.  
Jurassic. Eichstätt, Germany.  
Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 91, pl. 44, fig. 1.
26307. **Medusina radiata** (Linnarsson). Plastotype.  
Middle Cambrian. Bohemia.  
Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 58, fig. 16.
14929. **Medusites lindströmi** Walcott. Cotype.  
Lower Cambrian. Lugnas, Sweden.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, pl. 56, fig. 1.  
= *Medusina costata*.
6546. **Meekella striato-costata** (Cox). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 175, pl. 5, figs. 12a-c.
9218. **Meekella striatocostata** (Cox). Plesiotypes.  
Upper Carboniferous. Southern Iowa.  
White, Rept. U. S. Geogr. Surv., W. 100th Merid., IV, Pt. I, 1876,  
p. 126, pl. 9, figs. 4a-4e.
8185. **Meekoceras aplanatum** White. Cotypes.  
Triassic. Fifteen miles southeast of John Grays Lake,  
southeastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 112, pl. 31, figs. 1a-d.



8182. **Meekoceras gracilitatis** White. Cotypes.  
Triassic. Five miles west of John Grays Lake, south-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 115, pl. 31, figs. 2a-d.
8186. **Meekoceras mushbachianum** White. Cotypes.  
Triassic. Five miles west of John Grays Lake, south-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 114, pl. 32, figs. 1a-d.
43281. **Meekopora? aperta** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 485, pl. 76, figs. 1, 1a.
43282. **Meekopora clausa** (Ulrich). Plesiotypes.  
43283. Chester (Miss.). Sloans Valley and Grayson County,  
Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 485, pl. 76, fig. 6, pl. 77,  
figs. 7-7a.  
See *Fistulipora? clausa*.
43285. **Meekopora eximia** Ulrich. Cotypes and figured sections.  
Upper St. Louis or Chester (Miss.). Monroe County,  
Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 483, pl. 77, figs. 6c, 6d.
45942. **Meekospira subconica** Ulrich and Scofield. Holotype.  
Richmond (Ord.). Near Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept. III, Pt. II, 1897, p. 1080, pl. 81, figs. 40, 41.
8562. **Megalaspis belemnurus** White. Holotype.  
Upper Pogonip (Ord.). Queen Spring Hill, Schell Creek  
Range, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 11; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 59, pl. 3, fig. 9.
34123. **Megambonia lata** Hall. Plesiotype.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian  
Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 569,  
pl. 70, figs. 5a, 5b.
13897. **Megambonia occidualis** Walcott. Cotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 173, pl. 5, fig. 1.
38145. **Megathentomum pustulatum** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 346, pl. 3,  
figs. 9, 10; Foss. Insects N. America, I, 1890, p. 310, pl. 18,  
figs. 9, 10.



36017. **Megistocrinus abnormis** (Lyon). Plesiotype.  
Hamilton (Dev.). Louisville, Kentucky.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, p. 63, pl. 15, fig. 3.
36014. **Megistocrinus expansus** Miller and Gurley. Plesiotype.  
Traverse (Dev.). Collins Quarry, Alpena, Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 66.
36013. **Megistocrinus regularis** Wood. Holotype.  
Traverse (Dev.). Collins Quarry, Alpena, Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 59, pl. 15, figs. 4, 4a.
35141. **Megistocrinus rugosus** Lyon and Casseday. Holotype.  
Hamilton (Dev.). Beargrass Creek, Louisville, Kentucky.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 63.
26397. **Megistocrinus sphæralis** Wood. Holotype and paratypes.  
26398. Traverse (Dev.). Collins Quarry, Alpena, Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 60, text figs. 2, 3; p. 61, pl. 15, figs. 1, 1a-b.
26395. **Megistocrinus tuberatus** Wood. Holotype and paratypes.  
Traverse (Dev.). Partridge Point, south of Alpena, Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 57, text fig. 1; p. 58, pl. 15, figs. 2a-c; pl. 16, figs. 3, 3a.
83623. **Meioceras cingulatum** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 302, pl. 16, figs. 6, 7.
8085. **Melampus antiquus** Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 507.
8085. **Melampus ? antiquus** Meek. Cotypes.  
Montana (Cret.). Near Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 23, pl. 12, figs. 11a-d; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 444, pl. 5, figs. 13-16.
22335. **Melampus clarkii** White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 42, pl. 5, figs. 2, 3.
500. **Melampus priscus** Meek. Holotype.  
Bear River (Cret.). Bear River, near mouth of Sulphur Creek, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 315.  
= **Rhytophorus priscus**.



2149. **Melania anthonyi** Meek and Hayden. Holotype and paratype.  
Laramie (Cret.). Yellowstone River, thirty miles above  
its mouth, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 124.  
= *Hydrobia anthonyi*.
696. **Melania arcta** Meek. Cotypes.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 314.  
= *Goniobasis arcta*.
2142. **Melania convexa** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856,  
p. 70 and p. 125; *ibid.*, for 1857, p. 138.  
= *Goniobasis convexa*.
498. **Melania humerosa** Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur  
Creek, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 313.  
= *Pyrgulifera humerosa*.
8197. **Melania? insculpta** Meek. Cotypes.  
Laramie (Cret.). Rock Springs, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 94, pl. 20, fig. 4a.  
See *Goniobasis ? insculpta*.
12490. **Melania insculpta** Meek. Plesiotypes.  
Laramie (Cret.). Northeastern Colorado.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 460, pl. 26,  
figs. 4, 5.
2144. **Melania invenusta** Meek and Hayden. Holotype and  
paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 136.  
= *Goniobasis invenusta*.
2137. **Melania minutula** Meek and Hayden. Holotype.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 123.  
= *Micropyrgus minutulus*.
2148. **Melania multistriata** Meek and Hayden. Holotype  
parat.  
Laramie (Cret.). Mouth of Yellowstone River, N  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. .  
= *Campeloma multistriata*.



2138. **Melania nebrascensis** Meek and Hayden. Holotype and  
2139. paratypes.  
2160. Laramie (Cret.). Fort Clark, and mouth of Yellowstone  
River, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 124.  
= *Goniobasis nebrascensis*.
685. **Melania ? nitidula** Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur  
Creek, Wyoming.  
Meek Proc. Acad. Nat. Sci. Phila., for 1860 p. 314.  
= *Limnæa nitidula*.
2184. **Melania omitta** Meek and Hayden. Holotype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 136.  
= *Goniobasis omitta*.
12541. **Melania ? sculptilis** Meek. Cotypes.  
Tertiary. Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 195,  
pl. 17, fig. 8.
691. **Melania simpsoni** Meek. Cotype.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek Proc. Acad. Nat. Sci. Phila., for 1860, p. 313.
2145. **Melania sublævis** Meek and Hayden. Holotype and  
paratype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 136.  
= *Goniobasis sublævis*.
12551. **Melania ? subsculptilis** Meek. Cotypes.  
Tertiary. Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 196,  
pl. 17, fig. 9.
19180. **Melania subtortuosa** Meek and Hayden. Holotype and  
paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 136.  
= *Goniobasis ? subtortuosa*.
2141. **Melania tenuicarinata** Meek and Hayden. Holotype and  
paratypes.  
Fort Union (Cret.). Fort Union, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 137.  
= *Goniobasis tenuicarinata*.



1978. **Melania (Potodoma) veterna** Meek and Hayden. Cotypes.  
Jurassic. Head of Wind River, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 444.  
= *Lioplacodes veternus*.
2147. **Melania warrenana** Meek and Hayden. Holotype.  
Fort Union (Cret.). Square Butte, thirty miles below  
Fort Clark, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 137.  
= *Hydrobia warrenana*.
7833. **Melania (Goniobasis?) wyomingensis** Meek. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 516.
9018. **Melania wyomingensis** Meek. Plesiotypes.  
12491. Laramie (Cret.). Crow Creek, Northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 95, pl. 28, figs. 6a, 6b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 460, pl. 26, figs. 1, 2, 3.
11559. **Melanopsis? americana** White. Cotypes.  
12495. Laramie (Cret.). Valley of South Platte, Colorado.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 96, pl. 4, figs. 9, 10;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 461, pl. 23, figs.  
21-23.
115513. **Melanopsis capula** Guppy. Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Quar. Journ. Geol. Soc. London, XXII, 1886, p. 580,  
pl. 26, fig. 14.  
= *Crepidacella cepula*.
114544. **Melongena sculpturata** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 118,  
pl. 8, fig. 3.
114544. **Melongena sculpturata sculpturata** Dall. Cotypes.  
Oligocene. Chipola, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 119.
112045. **Melongena sculpturata turricula** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 119, pl. 8, fig. 3.
135319. **Melongena subcoronata aspinosa** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. 1  
p. 120, pl. 9, fig. 6.



35158. **Menophyllum (?) excavatum** Girty. Cotypes.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 511, pl. 67, figs. 1a, 1b, 1c, 1d, 1e, 1f.
35370. **Menophyllum ulrichanum** Girty. Cotypes.  
35371. Ouray (Miss.). Cascade Creek, Engineer Mountain quadrangle, and Canyon Creek, Needle Mountain quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 271, pl. 1, figs. 1, 2.
1842. **Meretrix californiana** Conrad. Holotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, V, 1856, p. 320, pl. 2, fig. 4.
107396. **Meretrix (Callista) pittsburgensis** Dall. Cotypes.  
Tejon (Eocene). Pittsburg, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 36, fig. 22; pl. 43, fig. 15.  
= *Macrocallista pittsburgensis*.
34121. **Meristella arcuata** Hall. Plesiotype.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 564, pl. 71, figs. 2a-2c.
34120. **Meristella arcuata atoka** Girty. Cotypes.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 567, pl. 71, figs. 1a-1f.
13842. **Meristella (Whitfieldia) nasuta** (Conrad). Plesiotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 148, pl. 3, figs. 8-8b.  
= *Meristella nasuta*.
7899. **Mesalia ? kansasensis** Meek. Holotype and paratypes.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 333, pl. 2, figs. 7a, 7b.  
See *Turritella kansasensis*.
20116. **Mesalia obsuta** White. Cotypes.  
Chico (Cret.). Near Pences Ranch, Butte County, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 20, pl. 4, figs. 6, 7.



147040. **Mesalia pleboides** Vaughan. Cotypes.  
 Claibornian (Eocene). Hammetts Branch, near Mount  
 Lebanon, Louisiana.  
 Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 36, pl. 3, figs.  
 4, 5, 6.
164877. **Mesodesma alaskensis** Dall. Holotype.  
 Eocene. Chichagof Cove and West Cove, Alaska.  
 Dall, Harriman Alaska Exped., IV, 1904, p. 108, pl. 9, fig. 1.
12509. **Mesodesma bishopi** White. Cotypes.  
 Eocene. Bijou Basin, forty miles east of Denver, Colorado.  
 White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 128.  
 [The locality given is erroneous, and the true locality is unknown.  
 See Eleventh Ann. Rept. U. S. Geol. Surv. Terr., pp. 191, 192.—  
 T. W. STANTON.]
158324. **Mesomorpha duncani** Vaughan. Cotypes.  
 Midway (Eocene). Prairie Creek, Alabama.  
 Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 159, pl. 18,  
 figs. 8-10.
15399. **Mesonacis vermontana** (Hall). Plastotypes.  
 Lower Cambrian. Parker's quarry, Georgia, Vermont.  
 Walcott, Amer. Journ. Sci. (3), XXIX, 1885, p. 329, text figs. 1, 2;  
 Bull. No. 30, U. S. Geol. Surv., 1886, p. 158, pl. 24, figs. 1-1b.  
 See Olenellus (*Mesonacis*) *vermontana*.
22915. **Mesostoma occidentalis** Stanton. Cotypes.  
 Colorado (Cret.). Malachite, Huerfano Park., Colorado.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 139, pl. 30,  
 figs. 7, 8.
43182. **Mesotrypa angularis** Ulrich and Bassler. Holotype and  
 figured sections.  
 Trenton (Ord.). Frankfort, Kentucky.  
 Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
 p. 23, pl. 7, figs. 7-9.
43544. **Mesotrypa discoidea** Ulrich. Holotype and figured sections.  
 Trenton (Ord.). Goodhue County, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 260, fig. 16.
44056. **Mesotrypa echinata** Ulrich and Bassler. Holotype and  
 figured sections.  
 Trenton (Ord.). Nashville, Tennessee.  
 Ulrich and Bassler, Smith. Misc. Coll., Quart., XLVII, 1904, p. 22,  
 pl. 7, figs. 4-6.
43542. **Mesotrypa infida** Ulrich. Cotypes and figured sec<sup>t</sup>  
 43543. Black River (Ord.). Fountain and Minneapolis, M  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III  
 1893, p. 258, pl. 17, figs. 1-8



43540. **Mesotrypa quebecensis** (Ami). Plesiotype and figured sections.  
Trenton (Ord.). Little Falls, New York.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 248, fig. 15, e, f, p. 259.
43545. **Mesotrypa** (?) **rotunda** Ulrich. Holotype and figured sections.  
Trenton (Ord.). Hader, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 262, fig. 17.
43546. **Menotrypa** (?) **spinosa** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minnesota, Final Rept., III, Pt. I, 1893, p. 259, pl. 17, figs. 9-12.
43541. **Menotrypa whiteavesi** (Nicholson). Plesiotype and figured sections.  
Trenton (Ord.). Ottawa, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 248, figs. g, h.
29407. **Metengonoceras ambiguum** Hyatt. Holotype.  
Comanche (Lower Cret.). On Beecaves road, nine miles from Austin, Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 183, 184, pl. 26, figs. 5-7.
29403. **Metengonoceras dumbli** (Cragin). Cotype.  
Colorado (Cret.). Four miles east of Whitesboro, Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 185-187, pl. 27, figs. 3-14.
29404. **Metengonoceras inscriptum** Hyatt. Cotypes.  
29405. Fredericksburg (Lower Cret.). Twelve miles northwest of Decatur; Beecaves road, nine miles from Austin, Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 180-182, pl. 25, figs. 7, 9; pl. 26, figs. 1-4.
19105. **Metengonoceras inscriptum** var? Hyatt. Cotype.  
29406. Fredericksburg (Lower Cret.). Fifteen miles west of Denison, and Cow Creek, Travis County, Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 180-182, pl. 25, fig. 8.
114629. **Metis chipolana** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1042, pl. 47, fig. 21.
115061. **Metis magnoliana** Dall. Holotype.  
Upper Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1042, pl. 49, fig. 6.



115660. **Metis trinitaria** Dall. Holotype.  
Oligocene. Trinidad, West Indies.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1041, pl. 46, fig. 24.
29409. **Metoicoceras kanabense** Hyatt. Holotype.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pl. 15, figs. 9-11.
29408. **Metoicoceras whitei** Hyatt. Paratype.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 122-127, pl. 13, figs. 3-5.
17358. **Metoptoma ? analoga** Walcott. Holotype.  
Upper Pogonip (Ord.). Pogonip Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 84, pl. 1, figs. 11, 11a.
13961. **Metoptoma devonica** Walcott. Holotype.  
Middle Devonian. County Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 195, pl. 17, figs. 2, 2a.  
= *Scenella devonica*.
23844. **Metoptoma ? minneiskensis** Walcott. Holotype.  
Upper Cambrian. Minneiska, Minnesota.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 267, pl. 20, fig. 2.
23843. **Metoptoma ? peracuta** Walcott. Holotype.  
Upper Cambrian. Spoffords Bluff, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus. XIII, 1890, p. 267, pl. 20, fig. 1.
14424. **Metoptoma peroccidens** Walcott. Cotypes.  
Lower Carboniferous. Richmond Mountain, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 260, pl. 18, fig. 16.  
= *Lepetopsis peroccidens*.
17359. **Metoptoma phillipsi** Walcott. Cotypes.  
Upper Pogonip (Ord.). Pogonip Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 83, pl. 1, figs. 4, 4a.  
= *Archinacella phillipsi*.
35204. **Michelinia placenta** White. Plesio  
35205. Madison (Miss.). Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 5  
67, figs. 3a, 3b.



18198. **Mickwitzia monolifera** Schmidt. Plesiotype.  
Lower Cambrian. Lugnas, Sweden.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 704, pl. 70, fig. 2g.
456. **Micrabacia americana** Meek. Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 1, pl. 28, figs. 1a, 1b.
38098. **Microblattina perdita** Scudder. Holotype.  
Coal Measures. East Providence, Rhode Island.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 57, pl. 3, fig. 5.
46048. **Microceras minutissima** Ulrich. Cotypes.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 13, pl. 7, fig. 8.
18329. **Microdiscus bellimarginatus** Shaler and Foerste. Plesiotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 630, pl. 81, figs. 2a-2b.
17449. **Microdiscus connexus** Walcott. Cotype.  
Lower Cambrian. Near Salem, Washington County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 194, pl. 1, figs. 4, 4b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 631, pl. 80, figs. 9-9b.
18361. **Microdiscus helena** Walcott. Cotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 40; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 632, pl. 81, figs. 1, 1a.
15394. **Microdiscus lobatus** (Hall). Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 156, pl. 16, figs. 1-1b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 632, pl. 81, figs. 4-4b.
15396. **Microdiscus parkeri** Walcott. Cotype.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 157, pl. 16, figs. 2, 2a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 632, pl. 80, figs. 7-7a.
15397. **Microdiscus speciosus** Ford. Plesiotype.  
17478. Lower Cambrian. Troy, and Washington County, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 154, pl. 16, fig. 3c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 632, pl. 81, figs. 5-5c.



14399. **Microdon (Cypricardella) connatus** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 250, pl. 24, figs. 5, 5a.  
=Cypricardella connata.
13916. **Microdon (Cypricardella) macrostriatus** Walcott. Cotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 180, pl. 5, fig. 5.  
=Cypricardella macrostriata.
113894. **Micromelo (Abderospira) chipolana** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 23.  
See Bullina (Abderospira) chipolana.
2137. **Micropyrgus minutulus** (Meek and Hayden). Holotype.  
Laramie (Cret.). Three miles below Fort Union, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 575, pl. 43, figs. 18a, 18b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 465, pl. 26, fig. 20; Bull. No. 34, U. S. Geol. Surv., 1886, p. 31, pl. 2, fig. 24.  
See Melania minutula.
300. **Microstizia millepunctata** Meek. Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 4, pl. 28, figs. 2a-c.
25592. **Milesia quadrata** Scudder. Holotype.  
Older Tertiary. Green River, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890, p. 557, pl. 9, fig. 13.
43270. **Mitoclema cinctosum** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Bottom of gorge of Kentucky River, near High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 159, pl. 6, figs. 7, 7a.
43297. **Mitoclema (?) mundulum** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 177, figs. 4a-c; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 123, pl. 2, figs. 4-6.
135132. **Mitra hammakeri** Harris. Holotype.  
Eocene. Lee Hammaker's Well, Bradley County, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, Pt. II, 1894, p. 163, pl. 6, fig. 4.



97379. **Mitra holmesii** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 92, pl. 3, fig. 11.
97384. **Mitra lineolata** Heilprin. Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Heilprin, Trans. Wagner Free Inst. Sci. Phila., I, 1887, p. 133,  
pl. 16a, fig. 74.—Dall, *ibid.*, III, Pt. I, 1890, p. 91.
115799. **Mitra marylandica** Clark. Cotype.  
Eocene. Pamunkey Neck, Maryland.  
Clark, Johns Hopkins Univ. Circ. No. 15, 1895, p. 4; Bull. No. 141,  
U. S. Geol. Surv., 1896, p. 66, pl. 11, figs. 3a-b.
112112. **Mitra (mississippiensis var. ?) silicata** Dall. Holotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 93, pl. 4, fig. 11.
97381. **Mitra willcoxii** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 93,  
pl. 3, fig. 10.
97383. **Mitromorpha cincta** Dall. Holotype.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 95, pl. 3, fig. 6.
162557. **Mitromorpha intermedia** Arnold. Holotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 223, pl. 4, fig. 10.
97495. **Mitromorpha pygmæa** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 95, pl. 10, fig. 3.
1853. **Modiola contracta** Conrad. Holotype.  
Miocene. Sixteen miles south of Trés Pinos, Monterey  
County, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 325, pl. 5, fig. 35.
1882. **Modiola (Perna) formosa** Meek and Hayden. Cotypes.  
Jurassic. Big Horn Mountains, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 439.  
See *Volsella formosa*.



111604. **Modiola inflata** (Tuomey and Holmes). Plesiotype.  
Miocene. Bridgeton, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 39, pl. 6, fig. 4.  
= *Modiolus inflatus*.
23041. **Modiola major** Gabb. Plesiotypes.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p.  
48, pl. 3, fig. 1.
33900. **Modiola minor** Lea. Holotype.  
Upper Coal Measures. Near Wilkesbarre, Pennsylvania.  
Lea, Journ. Acad. Nat. Sci. Phila. (2), II, 1852, p. 205, pl. 20, fig. 2.
7781. **Modiola (Brachydontes) multilinigera** Meek. Cotypes.  
Colorado (Cret.). Near Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 492.—  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 86, pl. 19,  
fig. 3.  
See *Volsella (Brachydontes) multilinigera*.
14372. **Modiola? nevadensis** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 239, pl. 19, fig. 8.
22311. **Modiola pealei** White. Cotypes.  
Bear River (Cret.). Sage, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 33, pl. 2, fig. 3.
6490. **Modiola? subelliptica** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 211,  
pl. 10, fig. 5.
154872. **Modiola texana** (Gabb). Plesiotype.  
Eocene. Near Red Land, Louisiana.  
Harris, Proc. Acad. Nat. Sci. Phila., 1895, p. 46, pl. 1, fig. 2.
33899. **Modiola wyomingensis** Lea. Holotype.  
Upper Coal Measures. Near Wilkesbarre, Pennsylvania.  
Lea, Journ. Acad. Nat. Sci. Phila. (2), II, 1852, p. 205, pl. 20,  
fig. 1a.  
= *Myalina wyomingensis*.
114890. **Modiolaria carolinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 806, pl. 35, fig. 12.
28166. **Modiolodon arcticus** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 161, pl. 13,  
figs. 18, 19.



46227. **Modiolodon declivis** Ulrich. Holotype.  
 Richmond (Ord.). Richmond, Indiana.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 654, pl. 53, figs. 3, 4.
46228. **Modiolodon gantii** (Safford). Cotypes.  
 Trenton (Ord.). Wilson County, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, fig. 40d.  
 See *Cyrtodonta gantii*.
46229. **Modiolodon?** **gibbus** Ulrich. Holotype.  
 Black River (Ord.). Near Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 522, pl. 35, figs. 28, 29.
46230. **Modiolodon obtusus** Ulrich. Cotypes.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 654, pl. 52, figs. 20, 21.
46231. **Modiolodon oviformis** (Ulrich). Holotype and Plesiotype.  
 46232. Trenton (Ord.). Curdsville, Kentucky; Wilson County, Tennessee.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 652, pl. 53, figs. 7, 8; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, fig. 40g.  
 See *Modiolopsis oviformis*.
46233. **Modiolodon oviformis amplus** Ulrich. Cotypes.  
 Trenton (Ord.). Frankfort, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 653, pl. 53, figs. 1, 2.
46234. **Modiolodon patulus** Ulrich. Cotypes.  
 46235. Trenton (Ord.). Near Kenyon, Minnesota; near Danville, Kentucky; Decorah, Iowa.  
 46727. Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, pl. 37, figs. 20-24.
46236. **Modiolodon subovalis** Ulrich. Cotypes.  
 Richmond (Ord.). Versailles, Indiana.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 655, pl. 51, figs. 11-13.
46237. **Modiolodon subrectus** Ulrich. Holotype.  
 Richmond (Ord.). Richmond, Indiana.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 653, pl. 53, figs. 5, 6.
46238. **Modiolodon truncatus** (Hall). Plesiotypes.  
 46239. Richmond (Ord.). Versailles, Indiana.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 656, pl. 51, figs. 9, 10.
46240. **Modiolodon winchelli** (Safford). Plesiotypes.  
 Trenton (Ord.). Wilson County, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, figs. 40 e, f.



17445. **Modioloides prisca** Walcott. Holotype.  
Lower Cambrian. Near Whitehall, Washington County,  
New York.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 615, pl. 73,  
fig. 3.  
= *Modiolopsis* ?? *prisca*.
46201. **Modiolopsis alata** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 280, figs. 8a-c.  
= *Eurymya alata*.
46241. **Modiolopsis angustata** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 283, figs. 10a-e.
46242. **Modiolopsis arguta** Ulrich. Cotypes.  
46243. Black River (Ord.). Near Fountain, and Chatfield, Min-  
nesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 506, pl. 36, figs. 3-6.
46244. **Modiolopsis chatfieldensis** Ulrich. Holotype.  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 508, pl. 36, figs. 9, 10.
46246. **Modiolopsis concava** Ulrich. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 227, fig. 13; Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1894, p. 509, pl. 36, figs. 15, 16.
46245. **Modiolopsis concentrica** Hall and Whitfield. Plesiotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 510, pl. 37, figs. 15, 16.
46247. **Modiolopsis ? consimilis** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 505, pl. 42, figs. 17, 18.
46248. **Modiolopsis milleri** Ulrich. Cotypes.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Amer. Geol., V, 1890, p. 274, figs. 3a-d.
46249. **Modiolopsis modiolaris** Conrad. Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 481, figs. 37a, b.



46341. **Modiolopsis modioliformis** Meek and Worthen. Plastotype.  
Stones River (Ord.). Mineral Point, Wisconsin.  
Meek and Worthen, Geol. Surv. Ill., III, 1868, p. 294.  
= *Whiteavesia modioliformis*.
46250. **Modiolopsis mytiloides** Hall. Plesiotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 508, pl. 36, fig. 8.
46251. **Modiolopsis nana** Ulrich. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 507, pl. 36, fig. 7.
46252. **Modiolopsis oblonga** Ulrich. Holotype.  
Trenton (Ord.). West Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 272, figs. 1a-c.
46253. **Modiolopsis obsoleta** Ulrich. Holotype.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 509, pl. 36, figs. 11, 12.
17287. **Modiolopsis occidens** Walcott. Cotype.  
17288. Upper Pogonip (Ord.). Fish Creek Mountains, and Lone  
Mountain, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 77, pl. 1, fig. 5;  
pl. 11, figs. 14, 14a,
46197. **Modiolopsis orthonota** Meek and Worthen. Plastotype.  
Stones River (Ord.). Dunleith, Illinois.  
Meek and Worthen, Geol. Surv. Ill., III, 1868, p. 295.  
= *Endodesma orthonotum*.
46231. **Modiolopsis oviformis** Ulrich. Holotype.  
Trenton (Ord.). Curdsville, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 276, figs. 4a-c.  
= *Modiolodon oviformis*.
46254. **Modiolopsis oweni** Ulrich. Holotype.  
Trenton (Ord.). Five miles south of Cannon Falls, Min-  
nesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 506, pl. 42, figs. 15, 16.
46255. **Modiolopsis parva** Ulrich. Cotypes.  
46256. Trenton (Ord.). Burgin, Kentucky.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 282, figs. 9a-f.



17292. **Modiolopsis pogonipensis** Walcott. Cotypes.  
17293. Upper Pogonip (Ord.). Fish Creek Mountains and Lone Mountain, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 78, pl. 1, fig. 6; pl. 11, fig. 13.
46343. **Modiolopsis pulchella** Ulrich. Holotype.  
Trenton (Ord.). West Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 278, figs. 6a-c.  
= *Whiteavesia pulchella*.
46257. **Modiolopsis similis** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1892, p. 225; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 504, pl. 36, figs. 1, 2; pl. 42, fig. 19.
46258. **Modiolopsis simulatrix** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 277, figs. 5a-c.
46078. **Modiolopsis subelliptica** Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1892, p. 226, fig. 12.  
= *Allodesma subellipticum*.
46259. **Modiolopsis subparallela** Ulrich. Holotype.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 273, figs. 2a-c.
46676. **Modiolopsis subtruncata** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., V, 1890, p. 270, fig. 7.
46260. **Modiolopsis valida** Ulrich. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, fig. 40b.
46261. **Modiolopsis versailensis** Miller. Plesiotype.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 521, fig. 40a.
164893. **Modiolus alaskanus** Dall. Holotype.  
Eocene. Chichagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 106, pl. 10, fig. 3.
154370. **Modiolus (Brachydontes) grammatus** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 794, pl. 30, fig. 2.



114578. **Modiolus (Brachydontes) grammatus curtulus** Dall. Cotypes.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 794.
135747. **Modiolus (Brachydontes) guppyi** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 794, pl. 35, fig. 16.
164894. **Modiolus harrimani** Dall. Holotype.  
Eocene. Chichagof Cove and Peak, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 106, pl. 9, fig. 7.
154364. **Modiolus (Gregariella) minimus** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 797, pl. 35, fig. 26.
153890. **Modiolus pugetensis** Dall. Holotype.  
Eocene. Renton coal mine, near Seattle, Washington.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 792, pl. 35, fig. 17.
154349. **Modiolus silicatus** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 793, pl. 27, fig. 28. (On plate as *M. tampaënsis*.)  
*Modiolus tampaënsis* Dall. See *M. silicatus*.
13894. **Modiomorpha altiforme** Walcott. Cotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 169, pl. 5, fig. 9.
14373. **Modiomorpha ambigua** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 239, pl. 20, fig. 1.
14982. **Modiomorpha (?) chemos** Clarke. Holotype.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 30.
14374. **Modiomorpha ? desiderata** Walcott. Cotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 240, pl. 20, fig. 3.
12519. **Modiomorpha ? lata** Meek. Holotype.  
Upper Triassic. North Fork of Buena Vista Canyon,  
West Humboldt Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 103, pl. 10, fig. 2.



15893. **Modiomorpha oblonga** Walcott. Holotype.  
Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 170, pl. 5, fig. 7.  
=Sanguinolites (Spathella) oblonga.
13892. **Modiomorpha obtusa** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 171, pl. 4, figs. 8, 8a.
12543. **Modiomorpha ? (Modiolina) ovata** Meek. Cotypes.  
Upper Triassic. North Fork of Buena Vista Canyon,  
West Humboldt Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 103,  
pl. 10, figs. 1, 1a.
24327. **Modiomorpha pimentana** Hartt and Rathbun. Cotypes.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 123.—Clarke, Archivos do Mus. Rio de Janeiro, X, 1899,  
p. 52, pl. 6, figs. 5-9.
14375. **Modiomorpha ? pintoënsis** Walcott. Cotype.  
Lower Carboniferous. Near Pinto Peak, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 240, pl. 20, fig. 2.
113387. **Modulus compactus** Dall. Holotype.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 294, pl. 22, fig. 10.
112535. **Modulus turbinatus** (Heilprin). Plesiotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 294, pl. 18, fig. 12.
113386. **Modulus willcoxii** Dall. Cotypes.  
Oligocene. West of Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 294, pl. 18, fig. 1a.
112661. **Molleria duplinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 421, pl. 23, fig. 18.
87750. **Molleria minuscula** Dall. Holotype.  
Miocene. St. Marys River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 421.  
=Cyclostrema (Molleria) minuscula.
111660. **Monilea (Leiotrochus) eborea** Wagner. Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 135, pl. 24,  
figs. 7-10.



115469. **Monodonta basilea** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec., II, I, 1874, p. 434, pl. 16, fig. 2.  
= *Modulus basileus*.
12364. **Monopleura marcida** White. Cotypes.  
Edwards (Cret.). Near Austin, Texas.  
White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 8, pls. 3, 4.
12365. **Monopleura pinguiscula** White. Cotypes.  
Edwards (Cret.). Near Austin, Texas.  
White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 8, pl. 5.
35313. **Monopteria alata** Beede. Plesiotype.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 431, pl. 9, fig. 3.
15595. **Monopteria marian** White. Cotypes.  
Upper Carboniferous. Camp Apache, Navajo County,  
Arizona.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 22; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 151, pl. 11, figs. 4a-4c.
3958. **Monotis hawni** Meek and Hayden. Cotypes.  
Permian. Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 76.  
= *Pseudomonotis hawni*.  
See *Eumicrotis hawni*.
30192. **Monotis semiplicata** Hyatt. Cotypes.  
Triassic. American Canyon, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 414.
30193. **Monotis symmetrica** Hyatt. Cotypes.  
Triassic. American Canyon, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 414.
43556. **Monotrypa (Chætetes?) cumulata** Ulrich. Holotype and  
figured sections.  
Trenton (Ord.). Goodhue County, Minn.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 307, pl. 27, figs. 26, 27.
43553. **Monotrypa intabulata** Ulrich. Holotype and figured  
sections.  
Trenton (Ord.). Goodhue County, Minn.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 305, fig. 20.



43555. **Monotrypa magna** Ulrich. Holotype and figured sections.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 304, pl. 27, figs. 28, 29.
43554. **Monotrypa nodosa** Ulrich. Cotypes.  
Richmond (Ord.). Savannah, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 306.
43779. **Monotrypa rectimuralis** Ulrich. Cotype and figured  
sections.  
Cincinnatian (Ord.). Alexander County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 462, pl. 38, figs. 4a, 4b.
43684. **Monotrypella æqualis** Ulrich. Holotype and figured  
sections.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 247, pl. 11,  
figs. 3-3b.
43751. **Monotrypella appressa** Ulrich. Cotypes and figured  
sections.  
Middle Devonian. Rock Island, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 453, pl. 46, figs. 1-1e (on  
plate as *M. simplex* in error).  
= *Eridotrypa appressa*.
43780. **Monotrypella crassimuralis** Ulrich. Figured sections of  
cotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 452, pl. 38, figs. 2c-2f.  
= *Rhombotrypa crassimuralis*.
35401. **Monotrypella quadrata** (Rominger). Plesiotypes.  
Richmond (Ord.). Oxford, Ohio.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 9, 10.  
= *Rhombotrypa quadrata*.
43685. **Monotrypella subquadrata** Ulrich. Cotypes and figured  
sections.  
Richmond (Ord.). Osgood, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 249, pl. 11,  
figs. 4-4b.  
= *Rhombotrypa subquadrata*.
135874. **Montacuta ? actinophora** Dall. Holotype.  
Upper Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1172,  
pl. 44, fig. 2.



115675. **Montacuta ? chipolana** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1171,  
pl. 44, fig. 4.
155768. **Montacuta claiborniana** Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1171,  
pl. 45, fig. 21.
144171. **Montacuta mariana** Dall. Holotype.  
Miocene. St. Marys River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1173,  
pl. 45, fig. 18.
155770. **Montacuta petropolitana** Dall. Holotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1173,  
pl. 45, fig. 6.
115772. **Montacuta sagrinata** Dall. Holotype.  
Miocene. York River, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1174,  
pl. 44, fig. 6.
43547. **Monticulipora arborea** Ulrich. Cotypes and figured sections.  
43548. Trenton (Ord.). Cannon Falls, Minnesota; near Burgin,  
Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 220, pl. 20, figs. 1-9, 13, 14.
43549. **Monticulipora (?) cannonensis** Ulrich. Holotype and  
figured section.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 221, pl. 20, figs. 10-12.
43170. **Monticulipora cleavelandi** James. Plesiotype and figured  
sections.  
Richmond (Ord.). Four and a half miles northwest of  
Wilmington, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 16, pl. 6, figs. 4-6.
43680. **Monticulipora consimilis** Ulrich. Holotype.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 238, pl. 10,  
fig. 2.  
= *Monticulipora lævis consimilis*.
8551. **Monticulipora dali** (Edwards and Haime). Plesiotype.  
Trenton (Ord.). Silver Canyon, Pahrangat Range,  
Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 66, pl. 4, fig. 5.



43172. **Monticulipora epidermata** Ulrich and Bassler. Cotypes.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII,  
1904, p. 17.
43591. **Monticulipora grandis** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 219, pl. 15, figs. 1-6.  
= *Prasopora grandis*.
43679. **Monticulipora lævis** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 236, pl. 10,  
figs. 1-1b.
43303. **Monticulipora lamellosa** Ulrich. Figured sections and  
fragment of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 408, pl. 32, figs. 4, 4b.  
= *Orbignyella lamellosa*.
35114. **Monticulipora mammulata** d'Orbigny. Figured section  
and fragment of holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII,  
1904, p. 16, pl. 6, figs. 1-3.
43682. **Monticulipora mammulata** d'Orbigny. Plesiotype and  
figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 234, pl. 10,  
figs. 5, 5a.
35405. **Monticulipora molesta** Nicholson. Plesiotype.  
Lorraine (Ord.). Two miles west of Goodlettsville,  
Tennessee.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, fig. 13.
9207. **Monticulipora monticula** White. Cotypes.  
Upper Devonian. Iowa City, Iowa.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 27.
43681. **Monticulipora parasitica** Ulrich. Holotype and figured  
sections.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 238, pl. 10,  
figs. 3, 3a.



43811. **Monticulipora parasitica plana** Ulrich.      Figured sections of  
holotype.  
Richmond (Ord.).    Stony Mountain, Manitoba.  
Ulrich, Geol. Surv. Canada, Contrib. Micro-Pal., Cambro-Sil., Pt.  
II, 1889, p. 29, pl. 8, figs. 3a-3d.
43690. **Monticulipora wetherbyi** Ulrich.      Cotypes and figured  
sections.  
Stones River (Ord.).    High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., v. 1882, p. 239, pl. 10,  
figs. 4-4b.  
= *Orbignyella wetherbyi*.
43302. **Monticulipora winchelli** Ulrich.      Figured sections of  
holotype.  
Traverse (Dev.).    Thunder Bay, Michigan.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 408, pl. 45, figs. 6-6a.
41685. **Moorea angularis** Ulrich.      Cotypes.  
41800.    Black River (Ord.).    Fountain, and Minneapolis, Minne-  
sota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 682, pl. 43, fig. 89; pl. 46, figs. 15, 16.
41683. **Moorea bicornuta** Ulrich.      Holotype.  
Hamilton (Dev.)    Eighteen Mile creek, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 191, pl.  
16, figs. 4a-c.
41680. **Moorea granosa** Ulrich.      Holotype.  
Chester (Miss.).    Near Grayson Springs Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 206, pl.  
12, figs. 9a, 9b.
41684. **Moorea punctata** Ulrich.      Cotypes.  
Black River (Ord.).    St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1894, p. 682, pl. 43, figs. 84-88.
1991. **Mortoniceras shoshonense** Meek.      Holotype.  
Colorado (Cret.).    Head of Wind River Valley, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 449, pl. 6, figs.  
3a, 3c, and 6b, upper figure.—Stanton, Bull. No. 106, U. S.  
Geol. Surv., 1893, p. 179, pl. 43, figs. 1, 2.
224. **Mortoniceras? vermilionense** (Meek and Hayden).      Holotype.  
Colorado (Cret.).    Mouth of Vermilion River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 450, pl. 7, figs.  
2a, 2b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 180,  
pl. 44, fig. 1.  
See *Ammonites vermilionense*.



153751. **Mulinia caloosaensis** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
902, pl. 28, figs. 4, 6.
153750. **Mulinia sapotilla** Dall. Cotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 902, pl. 28, figs. 7, 8, 9, 14.
17903. **Murchisonia bellicincta** Hall. Plesiotype.  
Trenton (Ord.). Elkader, Turkey River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa and Minn., 1852, pl. 2, fig. 8.  
= *Hormotoma* (?) major.
8927. **Murchisonia copei** White. Cotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.,  
1881, p. 31, pl. 3, figs. 10a, 10b.
25613. **Murchisonia gracilis** Hall? Plesiotype.  
Ordovician. Near South Berlin, Vermont.  
Walcott, Amer. Journ. Sci. (3), XXXV, 1888, p. 239, text fig. 7.
25614. **Murchisonia milleri** Hall? Plesiotypes.  
Ordovician. Pownal, Bennington County, Vermont.  
Walcott, Amer. Journ. Sci. (3), XXXV, 1888, p. 237, fig. 3.
17326. **Murchisonia milleri** Hall? Plesiotype.  
Upper Pogonip (Ord.). White Pine District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 79, pl. 1, figs.  
12, 12b.
45928. **Murchisonia sumnerensis** Safford. Cotypes.  
Trenton (Ord.). Sumner County, Tennessee.  
Safford, Geol. Tenn., 1869, pl. G, figs. 1a-f.  
= *Lophospira sumnerensis*.
8233. **Murchisonia terebra** White. Cotypes.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 219; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 139, pl. 34, fig. 4a.
112065. **Murex (Chicoreus?) burnsii** (Whitfield). Plesiotype.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 141.
135155. **Murex (Pteronotus) burnsii** (Aldrich). Plesiotype.  
Eocene. Carsons Creek, Wayne County, Mississippi.  
Dall, The Nautilus, VII, No. 9, 1894, p. 98, pl. 4, fig. 4.



112156. **Murex chrysostoma chipolana** Dall. Holotype.  
Oligocene. Ten Mile Creek, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 139.
115479. **Murex collatus** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 433, pl. 16, fig. 8.
87749. **Murex (Pterorhytis) conradi** Dall. Cotypes.  
Miocene. St. Marys River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 143, pl. 12, figs. 8, 11.
135148. **Murex marksi** Harris. Holotype.  
Eocene. One mile northeast of Pansy, Cleveland County, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 167, pl. 6, fig. 10.
112164. **Murex (Chicoreus?) micromeris** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 141, pl. 12, fig. 12.
111626. **Murex shilohensis burnsi** Whitfield. Holotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 98, pl. 17, fig. 2.
112165. **Murex (Pteronotus) textilis** (Gabb). Plesiotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 142, pl. 9, fig. 4.
112066. **Muricidea spinulosa** (Heilprin). Plesiotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 149, pl. 8, fig. 9.
3608. **Mya abrupta** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 723, Atlas, pl. 17, figs. 5, 5a.  
= *Panopea abrupta*.
15224. **Myacites inconspicuus** Meek. Holotype.  
Jurassic. Weber Canyon, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV Pt. I, 1877, p. 137, pl. 12, fig. 1.



210. **Myacites nebrascensis** Meek and Hayden. Holotype.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 182;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 100, pl. 4, fig. 5.
8061. **Myacites subcompressus** Meek. Plesiotypes.  
8180. Jurassic. Devils Slide, and near Lower Canyon of Yellow-  
stone, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 151, pl. 38, figs. 5a-e.
200. **Myacites subellipticus** (Meek and Hayden). Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 101, pl. 4, figs. 6a-c.  
See *Panopea* (*Myacites*) *subelliptica*.
13386. **Myacites (Pleuromya) weberensis** Meek. Holotype.  
Jurassic. Weber Canyon, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 137,  
pl. 12, figs. 11a.
2526. **Myalina aviculoides** Meek and Hayden. Cotypes.  
3961. Permian. Cottonwood Creek, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 184;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 51, pl. 2, figs. 8a-d.
15227. **Myalina aviculoides** Meek and Hayden. Plesiotypes.  
Permian or Triassic. Southeast of Salt Lake City, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 275, pl. 6, fig. 8.
21696. **Myalina aviculoides** Meek and Hayden. Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 28, pl. 2, fig. 12.
14369. **Myalina congeneris** Walcott. Cotypes.  
Lower Carboniferous. Richmond Mountain, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 237, pl. 19, fig. 6;  
pl. 22, fig. 10.
35310. **Myalina cuneiformis** Gurley. Plesiotypes.  
35311. Weber and Hermosa? (Upper Carb.). Ouray, and branch  
of Cement Creek, Crested Butte quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 420, pl. 8,  
figs. 14-17.
35306. **Myalina keokuk** Worthen. Plesioty  
Ouray (Miss.). Near Cascade Creek, Engineer Moun-  
quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 309, pl. 1, fig. 12.



14370. **Myalina nemesis** Walcott. Cotype.  
Lower Carboniferous. Near Pinto Peak, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 237, pl. 19, fig. 5;  
pl. 22, fig. 7.
14371. **Myalina nessus** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 238, pl. 22, figs.  
8, 8a.
1022. **Myalina perattenuata** Meek and Hayden. Holotype and  
paratype.  
Upper Carboniferous. "Opposite north boundary of Mis-  
souri, on the Missouri River" = Region of Nemaha,  
Nebraska.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 77; Pal.  
Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864,  
p. 32, pl. 1, figs. 12a, 12b.
21727. **Myalina perattenuata** Meek and Hayden. Plesiotype.  
Permian. Archer and Baylor counties, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 28, pl. 4, figs.  
13-15.
8933. **Myalina permiana** (Swallow). Plesiotypes.  
9445. Upper Carboniferous. Coyote and Cebolla creeks, and  
9456. Taos Peak, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.,  
1881, p. 25, pl. 3, figs. 1a-1d.
15226. **Myalina permiana** (Swallow). Plesiotypes.  
Permian or Triassic. Southeast of Salt Lake City, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 276, pl. 6, fig. 7.
21726. **Myalina permiana** (Swallow). Plesiotype.  
Permian. Archer and Baylor counties, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 28, pl. 4, figs.  
16-19.
1153. **Myalina permiana** (Swallow). Plesiotypes.  
Permian. Cottonwood Creek, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 52, pl. 2, figs. 7a-c.
998. **Myalina subquadrata** Shumard. Plesiotypes.  
Upper Carboniferous. Leavenworth, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 33, text figs. A, B.
35307. **Myalina subquadrata** Shumard. Plesiotypes.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 424, pl. 8,  
figs. 6, 7.



6519. **Myalina (?) swallovi** McChesney. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 201, pl. 9, figs. 7a, 7b.
8478. **Myalina ? swallovi** McChesney. Plesiotype.  
Upper Carboniferous. Fort Apache, Navajo County, Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 152, pl. 11, fig. 8a.
35308. **Myalina wyomingensis** Lea. Plesiotypes.  
35309. Rico (Upper Carb.). Scotch Creek, Rico quadrangle,  
Colorado, and Graham, Young County, Texas.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 422, pl. 8, figs.  
8-13.
38051. **Mylacris ampla** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 45, pl. 2, fig. 1.
38050. **Mylacris antiqua** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 300; Foss.  
Insects N. America, I, 1890, p. 264; Bull. 124, U. S. Geol.  
Surv., 1895, p. 46, pl. 2, figs. 5, 6.
38052. **Mylacris carbonum** Scudder. Cotypes.  
38053. Upper Coal Measures. Empire Mine, Wilkesbarre and  
Cannelton, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 304, pl. 27,  
figs. 6, 7, 10; Foss. Insects N. America, I, 1890, p. 268, pl.  
13, figs. 6, 7, 10.
25924. **Mylacris (Dipeltis) diplodiscus** Packard. Cotype and  
25925. plesiotype.  
38864. Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, American Nat., XIX, 1885, p. 293; Mem. Nat. Acad.  
Sci. III, 1886, p. 145, pl. 5, fig. 2.—Schuchert, Proc. U. S.  
Nat. Mus., XIX, 1897, pl. 58, figs. 3, 5.—Sellards, Amer. Journ.  
Sci. (4), XV, 1903, pl. 7, fig. 8.  
[This is now known to be the larva of a cockroach.]
38049. **Mylacris elongata** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 41, pl. 1, fig. 6.
38054. **Mylacris lucifuga** Scudder. Holotype.  
Upper Coal Measures. Port Griffith Switchback,  
Pittston, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 301, p.  
fig. 8; Foss. Insects N. America, I, 1890, p. 265, pl. 13, 14.



38101. **Myiacris ovalis** Scudder. Cotypes.  
Upper Coal Measures. Cannelton, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 308, pl. 27,  
fig. 5; Foss. Insects N. America, I, 1890, p. 272, pl. 13, fig. 5.
38102. **Myiacris pennsylvanica** Scudder. Cotypes.  
Upper Coal Measures. Cannelton, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 302, pl. 27,  
fig. 11; Foss. Insects N. America, I, 1890, p. 266, pl. 13, fig. 11.
38055. **Myiacris priscovolans** Scudder. Cotypes.  
Upper Coal Measures. Cannelton, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1884, p. 307, pl. 27,  
fig. 9; Foss. Insects N. America, I, 1890, p. 271, pl. 13, fig. 9.
23042. **Myoconcha americana** Stanton. Holotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 48, pl. 2, figs. 11.
8586. **Myophoria ambilineata** White. Holotype.  
Jurassic. Camp Cottonwood, Old Mormon Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, I, 1876,  
p. 166, pl. 13, figs. 5a, b.
135714. **Myrtæa (Eulopia) furcata** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1359, pl. 52, fig. 13.
157637. **Myrtæa limoniana** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1358, pl. 52, fig. 10.
135717. **Myrtæa (Eulopia) vermiculata** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
1359, pl. 52, fig. 5.
111596. **Mysia parilis** Conrad. Plesiotype.  
111609. Miocene. Bridgeton, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 61, pl. 9,  
figs. 10-13.
13886. **Mytilarca chemungensis** (Conrad). Plesiotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 168, pl. 4, fig. 9.
13885. **Mytilarca dubia** Walcott. Cotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 168, pl. 4, fig. 5.



13888. **Mytilarca (Plethomytilus) oviformis** (Conrad). Plesiotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 169, pl. 5, fig. 11.
111603. **Mytiloconcha incrassata** (Conrad). Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 38, pl. 5, figs. 10, 11.
486. **Mytilus attenuatus** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 86.  
= *Modiola attenuata*.
13319. **Mytilus inezensis** Conrad. Cotypes.  
Miocene. Santa Inez Mountains, Monterey County, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, VII, 1857, p. 194, pl. 8, figs. 2, 3?
153344. **Mytilus pandionis** Dall. Holotype.  
Oligocene. Near Osprey, Little Sarasota Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 787, pl. 30, figs. 9, 10.
354. **Mytilus subarcuatus** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Dog River, near mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 276.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 69, pl. 38, figs. 2a, 2b.
12312. **Mytilus whitei** Whitfield. Cotypes.  
Jurassic. Near Sun Dance Hills, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 360, pl. 5, figs. 9-12.
8177. **Mytilus whitei** Whitfield. Plesiotype.  
Jurassic. Near Fontanelle Canyon, western Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 147, pl. 37, fig. 9a.
112140. **Nassa bidentata** (Emmons). Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phil., III, Pt. I, 1890, p. 133, pl. 9, fig. 9.
112142. **Nassa caloosaensis** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 133, pl. 9, fig. 7.



162553. **Nassa cerritensis** Arnold. Holotype.  
Pleistocene. Spanish Bight, San Diego, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 231, pl. 4, fig. 1.
124961. **Nassa johnsoni** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 241, pl. 13, fig. 12.
112141. **Nassa lapenotierei** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 133,  
pl. 9, fig. 8.
115490. **Nassa solidula** Guppy. Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Quar. Journ. Geol. Soc. London, XXII, 1866, p. 579,  
pl. 26, fig. 11.
112136. **Nassarina glypta** (Bush). Plesiotypes.  
Pliocene. Near Fort Thompson, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 132,  
pl. 9, fig. 11.
112841. **Natica alticallosa** Dall. Holotype.  
Oligocene. Ten-Mile Creek, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 365, pl. 22, fig. 28.
267. **Natica ? ambigua** Meek and Hayden. Holotype and  
paratype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
= Vanikoro ambigua.
9865. **Natica collina** Conrad. Holotype.  
Cretaceous. Between Rio San Pedro and Rio Puercos,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 157, pl. 13, figs. 2a, 2b.
112857. **Natica (Cryptonatica) floridana** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 366, pl. 17, fig. 5.
111652. **Natica (Lunatia) hemicrypta** (Gabb). Plesiotypes.  
Miocene. Shiloh and Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 118, pl. 22,  
figs. 1-5.



12359. **Natica inezana** Conrad. Cotypes.  
Miocene. Santa Inez, Santa Barbara County, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 195, pl. 10, figs. 5, 6.  
= *Polynices* (Neverita) *recluziana*.
12536. **Natica ? lelia** Hall and Whitfield. Cotypes.  
Jurassic. Northwest of Rawlings, Wyoming, and east  
fork of Duchesne River, Uinta Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 298, pl. 7, figs. 19-21.
9898. **Natica limula** Conrad. Plesiotypes.  
Tertiary. Western Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 162, pl. 19, fig. 7.
264. **Natica moreauensis** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
= *Lunatia concinna*.
290. **Natica occidentalis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
= *Lunatia occidentalis*.
1836. **Natica œtitis** Conrad. Plesiotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 321, pl. 2, fig. 7.
265. **Natica subcrassa** Meek and Hayden. Holotype and  
paratypes.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 87.  
= *Lunatia subcrassa*.
9861. **Natica texana** Conrad. Holotype.  
Cretaceous. Between Rio San Pedro and Rio Puercos,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 157, pl. 13, figs. 1a, 1b.
266. **Natica tuomeyana** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 270.  
= *Vanikoropsis tuomeyana*.



111651. **Natica (Lunatia) tuomeyi** Whitfield. Cotypes.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 120, pl. 22,  
figs. 6-8.
115450. **Naticina regia** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 406, pl. 17, fig. 6.
8930. **Naticopsis altonensis** McChesney. Plesiotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.  
1881, p. 35, pl. 3, fig. 6a.
33979. **Naticopsis ? (Isonema) humilis** (Meek). Plesiotype.  
33981. Ouray (Upper Dev.). Five localities in central Colorado.  
Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p.  
60, pl. 7, figs. 9-11.
9459. **Naticopsis monilifera** White. Cotype.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.,  
1881, p. 34, pl. 3, fig. 3d.
8508. **Naticopsis nana** Meek and Worthen. Plesiotypes.  
Upper Carboniferous. Camp Cottonwood, near Spring  
Mountain, Lincoln County, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 159, pl. 12, figs. 4a, 4b.  
=Strophostylus nana.
8063. **Naticopsis remex** White. Cotype.  
Upper Carboniferous. Confluence of Grand and Green  
rivers, Utah.  
White, Rept. Geol. Uinta Mts. (Powell.), 1876, p. 109; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 139, pl. 34, fig. 6a.
21711. **Naticopsis remex** White. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor  
County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 24, pl. 3, fig. 10.
21694. **Naticopsis shumardi** McChesney. Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 24, pl. 3, fig. 11.
8932. **Naticopsis wheeleri** Swallow var. Plesiotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Supp.,  
1881, p. 33, pl. 4, figs. 6a, 6b.  
=Trachydomia wheeleri.
- Nautilus** ———? White = Nautilus (Coloceras) globulare.



3610. **Nautilus angustatus** Conrad. Cotypes.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 728, Atlas, pl. 20, fig. 5.
12461. **Nautilus campbelli** Meek. Holotype.  
Nanaimo (Cret.). Komooks, Vancouver Island.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1861, p. 318; Bull. U. S. Geol. and Geogr. Surv. Terr., II, No. 4, 1876, p. 373, pl. 6, figs. 2, 2a.
390. **Nautilus dekayi** Morton. Plesiotypes.  
Fort Pierre (Cret.). Sage Creek and Yellowstone River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 496, pl. 27, figs. 1a-e.
392. **Nautilus dekayi montanaensis** Meek. Holotype.  
Montana (Cret.). Yellowstone River, near Miles City, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 498, pl. 27, figs. 2a, 2b.
12347. **Nautilus dekayi montanaensis** Meek. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 439, pl. 16, figs. 10, 11.
4185. **Nautilus eccentricus** Meek and Hayden. Cotypes.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 83; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 65, pl. 2, figs. 14a, 14b.
1912. **Nautilus elegans** Sowerby. Plesiotypes.  
Colorado (Cret.) Chippewa Point, Missouri River, near Fort Benton, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 499, pl. 8, figs. 2a-c.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 163, pl. 35, fig 1.
1912. **Nautilus elegans nebrascensis** Meek and Hayden. Holotype.  
Colorado (Cret.). Chippewa Point, Missouri River, near Fort Benton, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1862, p. 25.
21717. **Nautilus (Coloceras) globulare** Hyatt. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 23, pl. 3, figs. 6-8 (as *Nautilus* ——?).



30241. **Nautilus hilli** Shattuck. Holotype.  
Buda (Lower Cret.). Shoal Creek, Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 35, pl. 23, fig. 3; pl. 24, figs. 3, 4.
6525. **Nautilus occidentalis** Swallow. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv., Nebraska (Hayden), 1872, p. 234, pl. 11, fig. 17.  
= *Tainoceras occidentalis*.
21712. **Nautilus occidentalis** Swallow. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 23, pl. 2, figs. 11, 12.  
= *Tainoceras occidentalis*.
21719. **Nautilus (Temnocheilus) winslowi** Meek and Worthen. Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 23, pl. 3, figs. 1-5.  
= *Temnocheilus winslowi*.
12327. **Neæra longirostra** Whitfield. Holotype.  
Jurassic. Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 376, pl. 5, fig. 35.
420. **Neæra moreauensis** (Meek and Hayden). Holotype and paratypes.  
Montana (Cret.). Moreau and Yellowstone rivers, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 239, pl. 17, figs. 11a-c.  
See *Corbula moreauensis*.
12272. **Neæra moreauensis** (Meek and Hayden). Plesiotype.  
Cretaceous. Forks of Cheyenne River, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 420, pl. 11, fig. 31.
419. **Neæra ventricosa** (Meek and Hayden). Holotype and paratypes.  
Montana (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 238, pl. 30, figs. 3a-c.  
See *Corbula ventricosa*.
38534. **Necromyza pedata** Scudder. Holotype.  
Upper Miocene. Oeningen, Baden, Germany.  
Scudder, Geol. Mag., London, Dec. IV, 11, 1895, p. 121, pl. 6, fig. 5.



38056. **Necmylacris heros** Scudder. Holotype.  
Upper Coal Measures. Boston Mine, near Pittston, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 54, pl. 5, fig. 9;  
Foss. Insects N. America, I, 1890, p. 74, pl. 5, fig. 9.
38057. **Necmylacris lacoana** Scudder. Holotype.  
Upper Coal Measures. Boston Mine, near Pittston, Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1879, p. 53, pl. 5, fig. 12;  
Foss. Insects N. America, I, 1890, p. 73, pl. 5, fig. 12.
9872. **Neithea occidentalis** Conrad. Paratypes.  
Lower Cretaceous. Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 150.
9896. **Neithea texana** (Roemer). Plesiotypes.  
Lower Cretaceous. Between El Paso and Frontera, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 151.
43687. **Nematopora conferta** Ulrich. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 198, fig.  
22; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 206, pl. 3, figs. 21-23.
44100. **Nematopora delicatula** Ulrich. Plesiotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 206, pl. 3, figs. 26, 27.
43688. **Nematopora granosa** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Jour. Cincinnati Soc. Nat. Hist., XII, 1890, p. 196, figs. 20,  
20a-e; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 205, pl. 3, figs. 17-20.
43384. **Nematopora lineata** (Billings). Plesiotype and figured  
sections.  
Anticosti (Sil.). Anticosti Island, Gulf of St. Lawrence.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 646, pl. 29, figs. 7-7e.
43686. **Nematopora ovalis** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 197, figs.  
21, 21a-b; Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. I, 1893, p. 204, pl. 3, figs. 24, 25.  
See *Nematopora quadrata*.
43385. **Nematopora quadrata** Ulrich. Cotypes and figured  
sections.  
Trenton (Ord.). Trenton Falls, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 644, pl. 29, figs. 12-12c.  
= *Nematopora ovalis*.



428. **Nemodon sulcatus** (Evans and Shumard). Plesiotypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 82, pl. 15,  
figs. 6a, 6b.
22872. **Nemodon sulcatus** (Evans and Shumard)? Plesiotypes.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 91, pl. 21,  
fig. 5.
115717. **Neocyclotus (Ptychocochlis) bakeri** Simpson. Holotype.  
Miocene. Bowden, St. Thomas, Jamaica, British West  
Indies.  
Dall, Proc. U. S. Nat. Mus., XVII, 1894, p. 449, pl. 16, figs. 1, 2.
9873. **Nerinea schottii** Conrad. Cotypes.  
Fredericksburg (Lower Cret.). Near mouth of Pecos  
River, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 158, pl. 14, figs. 3a, 3b.
13411. **Nerita californiensis** White. Cotypes.  
Chico (Cret.). Todos Santos Bay, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1885, p. 12, pl. 5, figs. 7, 8.
112662. **Nerita tampaensis** Dall. Holotype and paratypes.  
112663. Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 421, pl. 17, fig. 3.
1979. **Neritella nebrascensis** Meek and Hayden. Cotypes.  
Jurassic. Head of Wind River, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 444;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172;  
XIV, 1864, p. 109, text figs.  
= *Neritina nebrascensis*.
7876. **Neritina (Neritella) bannisteri** Meek. Cotypes.  
12487. Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 499.
7876. **Neritina bannisteri** (Meek). Cotypes.  
12487. Montana (Cret.). Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 25, pl. 12, figs. 10-10c.
12504. **Neritina (Velatella) baptista** White. Holotype.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 89, pl. 29, figs. 6a, 6b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 458, pl. 23, figs. 16, 17.



7872. **Neritina (Dostia?) bellatula** Meek. Holotype.  
Cretaceous. Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 497.  
= **Neritina (Velatella) bellatula**.
7872. **Neritina (Velatella) bellatula** (Meek). Holotype.  
Montana (Cret.). Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 27, pl. 12, figs. 8a, 8b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 458, pl. 5, figs. 8, 9.  
See **Neritina (Dostia?) bellatula**.
11558. **Neritina bruneri** White. Holotype.  
Laramie (Cret.). Valley of the South Platte, Colorado.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 95, pl. 4, figs. 7, 8;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 459, pl. 23, figs.  
14, 15.
7873. **Neritina (Dostia?) carditoides** Meek. Holotype.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 499.  
= **Neritina (Velatella) carditoides**.
7873. **Neritina (Velatella) carditoides** (Meek). Holotype.  
Montana (Cret.). Coalville, Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 28, pl. 12, fig. 7a; Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 458, pl. 5, fig. 10.  
See **Neritina (Dostia?) carditoides**.
8632. **Neritina (Velatella) carditoides** (Meek). Plesiotypes.  
Montana (Cret.). South of Last Bluff, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 189, pl. 18, figs. 7a-7c.
112664. **Neritina chipolana** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 422,  
pl. 23, fig. 19.
112666. **Neritina (Theodoxus?) edentula** Dall. Holotype and  
112667. paratypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 422,  
pl. 19, fig. 11.
8093. **Neritina incompta** White. Holotype.  
Colorado? (Cret.). Sulphur Creek, near Hilliard Station,  
Wyoming.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 308,  
pl. 7, figs. 6a-6c.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
1893, p. 128, pl. 28, figs. 4, 5.



163751. **Neritina (Smaragdia) merida** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60,  
fig. 5.
12485. **Neritina naticiformis** White. Cotypes.  
Bear River (Cret.). Sulphur Creek, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 89, pl. 30, figs. 3a, 3b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 458, pl. 7, figs. 5, 6.
12485. **Neritina naticiformis** White. Cotypes and plesiotypes.  
23119. Bear River (Cret.). Sulphur Creek, and twenty miles  
north of Cokeville, Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 49, pl. 6, figs. 10-12.
1979. **Neritina nebrascensis** (Meek and Hayden). Holotype.  
Jurassic. Head of Wind River, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 457, pl. 3,  
figs. 10, 11; Bull. No. 29, U. S. Geol. Surv., 1886, p. 23, pl. 4,  
fig. 16.  
See *Neritella nebrascensis*.
7888. **Neritina (Dostia?) patelliformis** Meek. Cotypes.  
8094. Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 498.  
= *Neritina (Velatella) patelliformis*.
8094. **Neritina (Velatella) patelliformis** (Meek). Cotypes.  
Colorado (Cret.). Coalville, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 309,  
pl. 7, figs. 7a-d.  
See *Neritina (Dostia?) patelliformis*.
7888. **Neritina (Velatella) patelliformis** Meek. Cotypes and  
8094. plesiotypes.  
Colorado (Cret.). Coalville, Utah, and Bear River City,  
Wyoming.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 128, pl. 28,  
figs. 6-10.  
See *Neritina (Dostia?) patelliformis*.
8092. **Neritina (Velatella) patelliformis weberensis** White. Cotypes.  
Colorado (Cret.). Coalville, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 309,  
pl. 7, figs. 8a, 8b.
8587. **Neritina? phasiolaris** White. Cotypes.  
Jurassic. Salt Creek near Nephi, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 24; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 167, pl. 13, figs. 1a-d.



7884. **Neritina pisiformis** Meek. Cotypes.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 500.—  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I,  
 1883, p. 26, pl. 12, figs. 9a-c.  
 = *Neritina pisum*.
7883. **Neritina (Neritella) pisum** Meek. Holotype.  
 Colorado (Cret.). Coalville, Utah.  
 Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 500.  
 See *Neritina pisiformis*.
7883. **Neritina pisum** (Meek). Holotype.  
 Colorado (Cret.). Coalville, Utah.  
 White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 308,  
 pl. 7, figs. 11a-c.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
 1893, p. 127, pl. 28, figs. 1-3.  
 See *Neritina pisiformis*.
22309. **Neritina stantoni** White. Cotypes.  
 23114. Bear River (Cret.). Sage Station, and twenty miles north  
 of Cokeville, Wyoming.  
 White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 49, pl. 6, figs.  
 16-18.
8198. **Neritina volvilineata** White. Cotypes.  
 Laramie (Cret.). Black Buttes Station, Wyoming.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
 p. 88, pl. 21, figs. 6a, 6b; Third Ann. Rept. U. S. Geol. Surv.,  
 1883, p. 458, pl. 23, figs. 12, 13.
115616. **Neritina woodwardi** Guppy. Cotypes.  
 Miocene. Jamaica, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 291,  
 pl. 18, figs. 4, 5.
28946. **Neritina wyomingensis** Stanton. Holotype.  
 Jurassic. Three miles southeast of Gravel Peak, Yellow-  
 stone National Park.  
 Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 629,  
 pl. 75, figs. 4, 5.
109269. **Neverita coënsis** Dall. Holotype.  
 Miocene. Coe's Mill Run, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
 pl. 60, fig. 19.
111649. **Neverita duplicata** (Say). Plesiotype.  
 Miocene. Shiloh and Jericho, New Jersey.  
 Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 121, pl. 2  
 figs. 13-16.



43781. *Nicholsonella cumulata* Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 423, pl. 33, figs. 6b, 6c.
43550. *Nicholsonella laminata* Ulrich. Holotype and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 315, pl. 21, figs. 15-19, 21.
43392. *Nicholsonella ponderosa* Ulrich. Holotype and figured sections.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. Surv. Ill., 1890, p. 422, pl. 34, figs. 5-5d.
43551. *Nicholsonella ponderosa* Ulrich? Plesiotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 316, pl. 21, figs. 13, 14, 20, 22.
43552. *Nicholsonella pulchra* Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv., Final Rept., III, Pt. I, 1893, p. 314, pl. 21, figs. 8-12.
41913. *Nileus vigilans* (Meek and Worthen). Plesiotypes.  
Trenton (Ord.). Pleasant Grove, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 712, figs. 17-19.
113282. *Niso lineata* (Conrad). Plesiotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 245, pl. 20, fig. 4.
112197. *Niso willcoxiana* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 160, pl. figs. 5, 5b.
9887. *Nodosaria texana* Conrad. Cotypes.  
Washita (Lower Cret.). Between El Paso and Frontera, Texas.  
Conrad. Rept. U. S. Mexican Bond, Surv., Emory, I, Pt. II, 1857, p. 159, pl. 14, figs. 4a-c.
21103. *Nostoceras helicinum* (Shumard). Plesiotypes.  
Navarro (Cret.). Chatfield, Navarro County, Texas.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 573.
23280. *Nostoceras stantoni aberrans* Hyatt. Cotypes.  
Navarro (Cret.). Chatfield, Navarro County, Texas.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 572.



23279. **Nostoceras stantoni prematurum** Hyatt. Holotype.  
Navarro (Cret.). Chatfield, Navarro County, Texas.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 572.
23278. **Nostoceras stantoni retrorsum** Hyatt. Cotypes.  
Navarro (Cret.). Chatfield, Navarro County, Texas.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 570.
24657. **Nothozoe? vermontana** Whitfield. Plesiotype.  
Lower Cambrian. Bennington, Vermont.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 628, pl. 80,  
figs. 4-4b.
3640. **Nucula abrupta** Dana. Holotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 698, Atlas, pl. 7,  
figs. 3, 3a.
7607. **Nucula (?) anodontoides** Meek. Cotypes.  
Upper Carboniferous. Monongalia County, West Virginia.  
Meek, Third Rept. Regents West Virginia Univ., 1870-1871, p. 71.
115561. **Nucula baccata** Guppy. Holotype.  
Pliocene. Matura, Trinidad, West Indies.  
Guppy, Proc. Sci. Assoc. Trinidad, 1867, p. 174; *ibid.*, 1882,  
p. 171, pl. 7, fig. 12; Geol. Mag., London, Dec. II, I, 1874,  
p. 443, pl. 18, fig. 7.
6505. **Nucula beyrichi** von Schauroth? Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 203, pl. 10, fig. 18.
434. **Nucula cancellata** Meek and Hayden. Holotype and  
1931. paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota, and  
Deer Creek, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p.  
85.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 102,  
pl. 28, figs. 13 (a, c), d, e.
136098. **Nucula chipolana** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 575, pl. 32, fig. 10.
22876. **Nucula coloradoensis** Stanton. Holotype.  
Colorado (Cret.). Williams Creek, Huerfano P  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 94, pl. 21, fig.



3635. *Nucula concinna* Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 699, Atlas, pl. 7,  
fig. 4.
107401. *Nucula (Acila) cordata* Dall. Holotype.  
Miocene. Near Mist, Columbia County, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 573, pl. 40, fig. 4.
107402. *Nucula (Acila) decisa* (Conrad). Plesiotypes.  
Eocene. Pittsburg, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 573, pl. 40, figs. 1, 3.
164887. *Nucula (Acila) decisa* (Conrad). Plesiotype.  
Eocene. Chicagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 105, pl. 9, fig. 2.
323. *Nucula equilateralis* Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 84.  
= *Nuculana? equilateralis*.
307. *Nucula evansi* Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 84.  
= *Yoldia evansi*.
23047. *Nucula gabbi* Stanton. Holotype.  
Knoxville (Lower Cret.). Three miles south of Lowerys,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 51,  
pl. 6, figs. 11, 12.
3490. *Nucula impressa* Conrad. Cotypes.  
3491. Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas, pl. 18,  
figs. 7c-e.
14376. *Nucula insularis* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 241, pl. 20, fig. 14.
24333. *Nucula kayseri* Clarke. Holotype.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 70, pl. 8,  
figs. 1, 2.
14379. *Nucula levatiforme* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 241, pl. 22,  
figs. 1, 1a.



351. *Nucula obsoletistriata* Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
Pierre, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 275  
(as *N. obsoleta*striata).—Meek, Rept. U. S. Geol. Surv. Terr.,  
IX, 1876, p. 100, pl. 15, figs. 10c, 10d.
8231. *Nucula perumbonata* White. Holotype.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 217; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 136, pl. 34,  
figs. 7a, 7b.
436. *Nucula planimarginata* Meek and Hayden. Holotype and  
437. paratype.  
Fox Hills (Cret.). Moreau River, South Dakota, and  
Long Lake, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 85  
(as *N. planomarginata*).—Meek, Rept. U. S. Geol. Surv. Terr.,  
IX, 1876, p. 101, pl. 15, figs. 8a, 8b; pl. 28, fig. 16.
12259. *Nucula planimarginata* Meek and Hayden. Plesiotypes.  
Fort Pierre (Cret.). Cheyenne River, ten to fifteen miles  
west of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 406, pl. 11, figs. 5, 6.
111607. *Nucula proxima* Say. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 50, pl. 7,  
figs. 7-10.
136118. *Nucula prunicola* Dall. Holotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 576,  
pl. 32, fig. 9.
13900. *Nucula rescuensis* Walcott. Cotypes.  
Upper Devonian. Rescue Hill, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 172, pl. 15, fig. 9.
302. *Nucula scitula* Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 84.  
= *Yoldia scitula*.
107330. *Nucula shaleri* Dall. Cotypes.  
Miocene. Gay Head, Massachusetts.  
Dall, Amer. Journ. Sci. (3), XLVIII, 1894, p. 298; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 575, pl. 40, fig. 6.
136099. *Nucula sinaria* Dall. Holotype.  
Miocene. St. Marys River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 575,  
pl. 32, fig. 7.



23048. **Nucula storrsi** Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 52,  
pl. 6, figs. 13, 14.
352. **Nucula subplana** Meek and Hayden. Holotype.  
Montana (Cret.). Yellowstone River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 85.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 99, pl. 17,  
figs. 7a, 7b.
114951. **Nucula taphria** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 576,  
pl. 32, fig. 14.
6504. **Nucula ventricosa** Hall. Plesiotype.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 204,  
pl. 10, figs. 17a-c.
115562. **Nucula vieta** Guppy. Holotype.  
Pliocene. Matura, Trinidad.  
Guppy, Proc. Sci. Assoc. Trinidad, 1867, p. 174; Geol. Mag., Lon-  
don, Dec., II, I, 1874, p. 443, pl. 18, fig. 8; Proc. Sci. Assoc.  
Trinidad, 1882, p. 171, pl. 7, fig. 11.
6491. **Nuculana bellistriata attenuata** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 206, pl. 10, figs. 11a, 11b.
1948. **Nuculana bisulcata** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Deer Creek, North Platte, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 104, pl. 15,  
figs. 4a, 4b.  
= *Leda bisulcata*.
12265. **Nuculana bisulcata** (Meek and Hayden). Plesiotype.  
Montana (Cret.). Near Box Elder Creek, and East Fork  
of Beaver Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 407, pl. 11, fig. 7.  
= *Leda bisulcata*.
323. **Nuculana ? equilateralis** (Meek and Hayden). Holotype.  
Fort Pierre or Fox Hills (Cret.). Moreau River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 106, pl. 15, figs.  
7a, 7b.  
See *Nucula equilateralis*.



8122. **Nuculana inclara** White. Cotypes.  
Laramie? (Cret.). Danforth Hills, northwestern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 60, pl. 25, fig. 7a.
8062. **Nuculana obesa** White. Cotypes.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 216; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 136, pl. 34, figs.  
2a-2c.
305. **Nuculana subnasuta** (Hall and Meek). Plesiotype.  
Fort Pierre (Cret.). Great Bend of Missouri, below Fort  
Pierre, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 105, pl. 15,  
fig. 9.
24337. **Nuculites ererensis** Hartt and Rathbun. Cotype.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 120.
24328. **Nuculites nyssa** Hall. Plesiotypes.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875,  
p. 119.  
= *Nuculites nyssa majora*.
24329. **Nuculites nyssa majora** Clarke. Holotype.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 72, pl. 8,  
fig. 9.  
See *Nuculites nyssa*.
14177. **Nuculites triangulus** Hall and Whitfield. Holotype.  
Upper Devonian. Near Eberhardt Mill, White Pine Dis-  
trict, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 248, pl. 3, figs. 12, 13.
46315. **Nuculites yoldiaformis** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 24, pl. 7,  
fig. 20.  
= *Technophorus yoldiiformis*.
25696. **Nuttainia sparsa** Eaton. Plastotype.  
Middle Devonian. Coeymans, Albany County, New York.  
Green. Mon. Trilobites N. America, Phila., 1832, p. 89. Can  
= *Homalonotus dekayi*.  
See *Dipleura dekayi*.



13896. *Nyassa parva* Walcott. Cotypes.  
Middle and Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 173, pl. 15, figs. 14, 14a.
24554. *Obolella ? ambigua* Walcott. Cotypes.  
Lower Pogonip (Cambrian). Ridge east of Hamburg Mine, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 67, pl. 1, figs. 2a-2c.  
= *Elkania ambigua*.
18322. *Obolella atlantica* Walcott. Cotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 36; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 611, pl. 71, figs. 1-1c.
14891. *Obolella chromatica* Billings. Plesiotype.  
Lower Cambrian. L'Anse au Loup, Labrador.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 112, pl. 11, figs. 1-1b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 611, pl. 71, figs. 2-2b.
14892. *Obolella circe* Billings. Plesiotype.  
Lower Cambrian. Trois Pistoles, Quebec, Canada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 118, pl. 10, figs. 3, 3a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 611, pl. 71, figs. 3, 3a.
15347. *Obolella crassa* (Hall). Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 114, pl. 10, figs. 1a, 1c, 1e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 612, pl. 71, figs. 4a, 4c, 4e.
24555. *Obolella discoidea* Hall and Whitfield. Cotypes.  
Upper Cambrian. Eureka District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 205, pl. 1, figs. 1, 2.—Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 14.
35264. *Obolella (Glyptias) favosa* Linnarsson. Plesiotypes.  
Lower Cambrian. Vestergotland, Bithingen, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 675.
14889. *Obolella gemma* Billings. Plesiotype.  
15349. Lower Cambrian. Troy, New York, and Bic Harbor, Quebec, Canada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 116, pl. 10, figs. 2, 2b-2e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 612, pl. 71, figs. 5-5c.; pl. 72, figs. 2, 2a.  
= *Bicia gemma*.



35262. **Obolella lindstromi** Walcott. Cotypes.  
 35263. Lower Cambrian. Bjorkelunda, south of Simrishamn,  
 and Sularp, near Lund, Sweden.  
 Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 674.
35261. **Obolella mobergi** Walcott. Cotypes.  
 Lower Cambrian. Bjorkelunda, Sweden.  
 Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 673.
1025. **Obolella nana** Meek and Hayden. Cotypes.  
 Upper Cambrian. Central portions of Black Hills, South  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1861, p. 435;  
 American Jour. Sci. (2), III, 1862, p. 73, figs. 1, 2; Pal. Upper  
 Missouri, Smith. Contrib. to Knowl., Vol. XIV, 1864, p. 4,  
 pl. 1, figs. 3-3d.  
 = *Dicellomus nanus*.
24594. **Obolella nana** Meek and Hayden. Plesiotypes.  
 Upper Cambrian. Headwaters of Red Canyon Creek,  
 Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 340, pl. 2, figs. 14-16.  
 = *Dicellomus nanus*.
15353. **Obolella nitida** Ford. Plesiotype.  
 Lower Cambrian. Troy, New York.  
 Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 118, pl. 11, fig.  
 2; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 612, pl. 72,  
 fig. 1.
24593. **Obolella polita** (Hall). Plesiotypes.  
 Upper Cambrian. Head of Redwater Canyon, Black Hills,  
 South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 339, pl. 2, figs. 12, 13.  
 = *Lingulepis prima*.
35206. **Obolus (Lingulepis) acuminatus meeki** Walcott. Cotypes.  
 Flathead (Middle Cambrian). Crowfoot section, Gallatin  
 Range, Yellowstone National Park.  
 Walcott, Mon. U. S. Geol. Surv., XXXII, Pt. II, 1899, p. 444,  
 pl. 60, figs. 1, 1a.
35240. **Obolus (Lingulella) acutangulus** Roemer. Plesiotypes.  
 Upper Cambrian. Llano County, Texas.  
 Walcott, Proc. U. S. Nat. Mus., XXI, 1898, pp. 392-4, 420, pl. 27,  
 fig. 6; pl. 28, figs. 1, 2.
35241. **Obolus (Lingulella) amplus** Owen. Ple  
 Middle Cambrian. Dakota, Minnesota.  
 Walcott, Proc. U. S. Nat. Mus., XXI, 1898, pp. 392,  
 pl. 28, figs. 3, 4.



27302. **Obolus anceps** Walcott. Cotypes.  
Lower Pogonip (Cambrian). Adams Hill, Eureka Dis-  
trict, Nevada.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 388.

35238. **Obolus apollinis** Eichwald. Plesiotypes.  
Upper Cambrian. Near Reval, Russia.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, pp. 385, 391, 420,  
pl. 26, figs. 3-6.

27305. **Obolus (Lingulella) argutus** Walcott. Cotypes.  
Upper (?) Cambrian. Schellbourne, Schell Creek Range,  
Nevada.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 396.

35293. **Obolus (Lingulella) atavus** Matthew. Plesiotypes.  
Middle Cambrian. Dougal Brook, branch of Indian  
River, Cape Breton, Nova Scotia.

Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 609.

27306. **Obolus (Lingulella) auga** Walcott. Cotypes.  
Middle Cambrian. Shooks Gap in Bays Mountain, ten  
miles east of Knoxville, Tennessee.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 396.

27309. **Obolus (Lingulella) bellulus** Walcott. Cotypes.  
Upper Cambrian. Little Bell Island, Conception Bay,  
Newfoundland.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 398.

27307. **Obolus (Lingulella) bellus** Walcott. Cotypes.  
27308. Upper Cambrian. Little Bell and Great Bell islands, Con-  
ception Bay, Newfoundland.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 397.

**Obolus (Lingulella) bellus** Walcott, 1901 = **Obolus (Lingulella)**  
**lens** Matthew.

35259. **Obolus (Lingulella ?) bicensis** Walcott. Holotype.  
Lower Cambrian. Bic Harbor, Province of Quebec,  
Canada.

Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 688.

35295. **Obolus (Lingulella) canius** Walcott. Cotypes.  
Middle Cambrian. McLeans Brook, near Marian Bridge,  
Cape Breton, Nova Scotia.

Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 610.

35237. **Obolus (Lingulella) celatus** Volborth. Plesiotypes.  
Upper Cambrian. Jegelecht, near Reval, Russia.

Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 385, 420, pl. 26,  
figs. 1, 2.



27310. **Obolus (Lingulella) chuarensis** Walcott. Cotypes.  
Middle Cambrian. Head of Nunkoweap and Chuar Val-  
leys, Grand Canyon, Arizona.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 399.
35294. **Obolus (Lingulella) collicia** Matthew. Plesiotypes.  
Middle Cambrian. Dougal Brook, Branch of Indian  
River, Cape Breton, Nova Scotia.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 610.
35239. **Obolus (Lingulella) davisi** McCoy. Plesiotype.  
Lingula Flags (Upper Cambrian). Port Madoc, North  
Wales.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, pp. 391-4, 420, pl. 27,  
figs. 1-5.
- 27311 to 27313. **Obolus (Lingulella) desideratus** Walcott. Cotypes.  
Upper Cambrian and Lower Ordovician. Crowfoot Sec-  
tion, Gallatin Range, Wyoming; Hamburg Mine,  
Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 399.
35207. **Obolus (Lingulella) desideratus** Walcott. Cotypes.  
Gallatin (Upper Cambrian). Crowfoot section, Gallatin  
Range, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 445,  
pl. 60, figs. 2, 2a.
27314. **Obolus (Lingulella) dubius** Walcott. Cotypes.  
Middle Cambrian. Chisholm Mine, Ely Mountains, near  
Pioche, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 401.
35242. **Obolus (Lingulella) ella** Hall and Whitfield. Plesiotypes.  
35243. Middle Cambrian. East Canyon, Oquirrh Mountains,  
35244. Utah, near Pioche, Nevada, and near Helena, Mon-  
tana.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, pp. 390, 420, pl. 28,  
figs. 5-8.
27315. **Obolus (Lingulella) ellsii** Walcott. Cotypes.  
Upper Cambrian. Chaudiere River, Quebec, Canada.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 402.
27316. **Obolus (Lingulella) euglyphus** Walcott. Cotypes.  
Middle Cambrian. Head of Lava and Nunkoweap Valleys,  
Grand Canyon, Arizona.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 402.
35296. **Obolus (Westonia) finlandensis** Walcott. Co  
Middle Cambrian. Aland Saltvik, Finland.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 611.



27317. **Obolus (Lingulella) fragilis** Walcott. Cotypes.  
Middle Cambrian. Manuels Brook, Conception Bay, New-  
foundland.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 404.
27318. **Obolus (Lingulella) franklinensis** Walcott. Cotypes.  
Middle (?) Cambrian. Near Georgia, Vermont.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 404.
27319. **Obolus (Lingulella) hayesi** Walcott. Cotypes.  
Middle Cambrian. Coosa Valley, Cherokee County, Ala-  
bama.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 405.
27320. **Obolus (Lingulella) helena** Walcott. Cotypes.  
Middle Cambrian. Near Helena, Montana.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 406.
27321. **Obolus (Lingulella) ino** Walcott. Cotypes.  
Middle Cambrian. Two and one-half miles south of  
Rome, Georgia.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 406.
27322. **Obolus (Lingulella) lamborni minimus** Walcott. Cotypes.  
Upper Cambrian. Three and one-half miles south-south-  
west of Rogersville, Tennessee.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 407.
27307. **Obolus (Lingulella) lens** Matthew. Plesiotypes.  
27308. Upper Cambrian. Little and Great Belle Islands, Concep-  
tion Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 685 (as *O. (L.) bellus*); *ibid.*, XXV, 1902, p. 606.
27323. **Obolus (Lingulella) leos** Walcott. Cotypes.  
Upper Cambrian. One and one-half miles south of Rome,  
Georgia.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 407.
27324. **Obolus (Lingulella) lineolatus** Walcott. Cotypes.  
to Middle Cambrian. Head of Chuar, Kwagunt, and Nunko-  
27326. weap canyons, Grand Canyon, Arizona.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 408.
35257. **Obolus (Lingulella) linnarssoni** Walcott. Holotype.  
Middle Cambrian. Lovened, Westrogothia, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 688.
27303. **Obolus loperi** Walcott. Cotypes.  
Transition Cambrian to Ordovician. Cement Creek, three  
miles north of Hot Springs, Colorado.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 389.



27299. **Obolus mickwitzii** Walcott. Cotypes.  
Middle Cambrian. Hudson, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 386.
27327. **Obolus (Lingulella) mosia osceola** Walcott. Cotypes.  
Upper Cambrian. Osceola Mills, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 409.
27304. **Obolus namouna** Walcott. Cotypes.  
Middle Cambrian. Eau Claire, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 390.
27328. **Obolus (Lingulella) nanno** Walcott. Cotypes.  
Middle Cambrian. Bluntsville Valley, Alabama.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 409.
27329. **Obolus (Lingulella) oweni** Walcott. Cotypes.  
27330. Upper Cambrian. Gibraltar Bluff, near Lodi, Prairie du  
Sac, and Osceola Mills, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 410.
27301. **Obolus pandemia** Walcott. Cotypes.  
Middle Cambrian. Shooks Gap, Bays Mountain, ten miles  
east of Knoxville, Tennessee.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 388.
24592. **Obolus pectenoides** Whitfield. Cotypes.  
Upper Cambrian. Castle Creek, Black Hills, South Dakota.  
Whitfield, Ludlow's Rept. Recon. Black Hills Dakota, 1875,  
p. 103, figs. 1-3; Rept. Geol. and Resources Black Hills  
Dakota, 1880, p. 338, pl. 2, figs. 18, 19.
27331. **Obolus (Lingulella) phaon** Walcott. Cotypes.  
Middle Cambrian. Eau Claire, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 410.
27332. **Obolus (Lingulella) pogonipensis** Walcott. Cotypes.  
Base of Pogonip (Ord.). East of Hamburg Ridge, Eureka  
District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 411.
27333. **Obolus (Lingulella) prindlei** Walcott. Cotypes.  
27334. Lower Cambrian. One mile southwest of Wynantskill and  
five miles east of Albany, Rensselaer County, New  
York.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 412.
27335. **Obolus (Lingulella) punctatus** Walcott. Cotyp  
Middle Cambrian. Eureka District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 412.



35208. **Obolus (Lingulella) randomensis** Walcott. Cotypes.  
Upper Cambrian. Random Island, Smith Sound, Trinity  
Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 688.
27300. **Obolus rhea** Walcott. Cotypes.  
Middle Cambrian. Eau Claire, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 387.
27336. **Obolus (Lingulella) rogersi** Walcott. Cotypes.  
Lower Ordovician. Narragansett Bay, Rhode Island.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 413.
27337. **Obolus (Lingulella) rotundatus** Walcott. Cotypes.  
27338. Upper Cambrian and Lowest Ordovician. Schellbourne,  
Schell Creek Range, Nevada; west of Bear Creek, and  
south of Gallatin Valley, Montana.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 415.
35229. **Obolus (Acritis?) rugatus** Walcott. Holotype.  
Upper portion of Middle Cambrian. Secret Canyon, Eureka  
District, Nevada.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 694.
35291. **Obolus (Lingulella) schmalensei** Walcott. Cotypes.  
Middle Cambrian. Skane, Andrarum, Sweden.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 605.
35258. **Obolus (Lingulella) siemiradzki** Walcott. Cotypes.  
Middle Cambrian. Pepper Mountains, near Sandomir on  
the Vistula, Russian Poland.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 690.
27339. **Obolus (Lingulella) similis** Walcott. Cotypes.  
27340. Middle Cambrian. Deadwood, Black Hills, South Dakota.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 415.
27341. **Obolus (Lingulella) sinoe** Walcott. Cotypes.  
Middle Cambrian. Packsaddle Mountain, Llano County,  
Texas.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 416.
35290. **Obolus (Lingulella) spatulus** Walcott. Cotypes.  
Tonto (Middle Cambrian). Grand Canyon of the Colorado,  
southeast of Powells Plateau, Arizona.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 607.
27342. **Obolus (Lingulella) tarpa** Walcott. Cotypes.  
Middle Cambrian. One mile east of Postoak Springs,  
Roane County, Tennessee.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 417.



35220. **Obolus tetonensis** Walcott. Cotypes.  
Middle Cambrian. Head of Sheep Creek, Teton Range,  
Wyoming.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 684.
35292. **Obolus (Lingulella) welleri** Walcott. Cotypes.  
Upper Cambrian. Near Newton, New Jersey.  
Walcott, Proc. U. S. Nat. Mus., XXV, 1902, p. 608.
- 27343 **Obolus (Lingulella) willisi** Walcott. Cotypes.  
to Middle Cambrian. Near Knoxville, Tennessee.  
27346. Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 418.
35235. **Obolus (Lingulella) winona convexus** Walcott. Cotypes.  
Upper Cambrian. Osceola Mills, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 691.
27347. **Obolus (Lingulella) zetus** Walcott. Cotypes.  
Upper Cambrian. Head of Nunkoweap Valley, Grand  
Canyon, Arizona.  
Walcott, Proc. U. S. Nat. Mus., XXI, 1898, p. 419.
35256. **Obolus (?) zoppi** Walcott. Cotypes.  
Lower Cambrian. Canalgrande, Sardinia.  
Walcott, Proc. U. S. Nat. Mus., XXIII, 1901, p. 684.
112180. **Ocinebra (intermedia var?) alta** Dall. Holotype.  
Pliocene. Near Fort Deneaud, Caloosahatchie River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
150.
162543. **Ocinebra keepi** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 256, pl. 5, fig. 9.
162544. **Ocinebra lurida cerritensis** Arnold. Holotype.  
Pleistocene. Crawfish George's, San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 258, pl. 5, fig. 5.
41701. **Octonaria clavigera** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 195, pl.  
16, figs. 7a-c.
41674. **Octonaria curta** Ulrich. Holotype.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 195, pl.  
12, figs. 4a, 4b.



41707. **Octonaria ovata** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 194, pl. 16, figs. 6a, 6b.
41705. **Octonaria stigmata** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 193, pl. 16, figs. 8a, 8b.
41704. **Octonaria stigmata loculosa** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 194, pl. 16, fig. 10.
41706. **Octonaria stigmata oblonga** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 194, pl. 16, figs. 9a-c.
155114. **Oculina alabamensis** Vaughan. Cotypes.  
158249. Chickasawan (Eocene). Gregg's Landing, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 121, pl. 12, figs. 4-7.
158253. **Oculina aldrichi** Vaughan. Holotype.  
Red Bluff (Oligocene). Byram's Ferry, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 123, pl. 12, figs. 8, 8a.
158251. **Oculina harrisi** Vaughan. Holotype.  
Red Bluff (Oligocene). Red Bluff, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 122, pl. 12, figs. 9, 9a.
158245. **Oculina mississippiensis** (Conrad). Plesiotypes.  
Vicksburgian (Oligocene). Vicksburg, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 118, pl. 11, figs. 3-7, 11, 11a.
157515. **Oculina singleyi** Vaughan. Cotypes.  
Claibornian (Eocene). Smithville, Texas.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 120, pl. 12, figs. 1-3a.
158254. **Oculina (?) smithi** Vaughan. Cotypes.  
Midway (Eocene). Prairie Creek, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 123, pl. 12, figs. 10-11.
158235. **Oculina vicksburgensis** (Conrad). Plesiotypes.  
Vicksburgian and Red Bluff (Oligocene). Vicksburg, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 116, pl. 10, figs. 8-10.



9045. **Odontobasis buccinoides** White. Cotypes.  
Montana (Cret.). Near Point of Rocks Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 102, pl. 20, figs. 3a, 3b.
1943. **Odontobasis constricta** (Hall and Meek). Plesiotype.  
Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 352, figs. 41, 42,  
on p. 353.
9046. **Odontobasis ? formosa** White. Holotype.  
Montana (Cret.). Danforth Hills, northwestern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p.  
103, pl. 28, fig. 7a.
113304. **Odontostomia (Syrnola) attenuata** Dall. Holotype.  
Pliocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
252, pl. 13, fig. 8.
113302. **Odontostomia (Syrnola) caloosaënsis** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
252, pl. 15, fig. 12b.
148631. **Odostomia (Chrysallida) diegensis** Dall and Bartsch. Holotype.  
Post-Pliocene. San Diego, California.  
Dall and Bartsch in Arnold, Mem. Calif. Acad. Sci., III, 1903, p.  
284, pl. 1, fig. 8.
148635. **Odostomia (Evalea) stearnsii** Dall and Bartsch. Holotype.  
Post-Pliocene. San Diego, California.  
Dall and Bartsch in Arnold, Mem. Calif. Acad. Sci., III, 1903,  
p. 282, pl. 1, fig. 12.
30206. **Æcotraustes denticulata** Hyatt. Cotypes.  
Jurassic. Stanislaus River, opposite Bostwick's bar, Cali-  
fornia.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 427.
15456. **Ogygia parabola** Hall and Whitfield. Cotypes.  
Middle Cambrian. East Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 245, pl. 2, fig. 35.  
= *Bathyriscus productus*.
24606. **Ogygia ? problematica** Walcott. Cotypes.  
Middle Cambrian. Secret and New York Canyons, Eureka  
District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 63, pl. 10, figs.  
2a, 2b, 4.



15456. **Ogygia producta** Hall and Whitfield. Cotypes.  
Middle Cambrian. East Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 244, pl. 2, figs. 31-34.  
See *Bathyriscus productus*.
15451. **Ogygia? spinosa** Walcott. Holotype.  
Middle Cambrian. Secret Canyon, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 63, pl. 9, fig. 22.  
= *Zacanthoides spinosus*.  
See *Olenoides spinosus*.
30205. **Olcostephanus lindgreni** Hyatt. Holotype.  
Jurassic. Near Colfax, Placer County, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 427.
23089. **Olcostephanus (Simbirskites) mutabilis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Five miles north of Paskenta,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 77, pl. 15, figs. 1-5.
23090. **Olcostephanus (Polyptychites) trichotomus** Stanton. Holotype.  
Knoxville (Lower Cret.). Two miles south of Lowerys,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896),  
p. 78, pl. 16, fig. 1.
33669. **Oldhamia (Murchisonites) occidens** Walcott. Cotypes.  
Upper Cambrian or Ordovician. Nassau Township, Rensselaer County, New York.  
Walcott, Proc. U. S. Nat. Mus., XVI, 1894, p. 314, fig. 1.
15413. **Olenellus asaphoides** (Emmons). Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 168, pl. 17, figs.  
3, 5, 6, 10; pl. 25, fig. 8.  
See *Olenellus (Mesonacis) asaphoides*.
15413. **Olenellus (Mesonacis) asaphoides** (Emmons). Plesiotype.  
18350. Lower Cambrian. Greenwich and Troy, New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 41; Tenth Ann.  
Rept. U. S. Geol. Surv., 1890, p. 637, pl. 88, figs. 1, 1a, 1e, 1g;  
pl. 89, figs. 1, 1a; pl. 90, figs. 1, 1a.  
See *Olenellus asaphoides*.
18331. **Olenellus (Holmia) bröggeri** (Walcott). Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 638, pl.  
91; fig. 1; pl. 92, figs. 1-11.  
See *Olenellus (Mesonacis) bröggeri*.



18331. **Olenellus (Mesonacis) bröggeri** Walcott. Cotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 41.  
See *Olenellus (Holmia) bröggeri*.

8574. **Olenellus gilberti** (Meek ms.) White. Cotypes and  
15411. plesiotype.  
15412. Lower Cambrian. Pioche, Prospect Mountain, and High-  
15416. land Range, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 7; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 44, pl. 2, figs. 3a-3e.—Walcott, Mon. VIII, U. S. Geol.  
Surv., 1884, p. 29, pl. 9, figs. 16, 16a; pl. 21, fig. 13; Bull.  
No. 30, U. S. Geol. Surv., 1886, p. 170, pl. 18, figs. 1-1c; pl.  
19, figs. 2-2k; pl. 20, figs. 1-1l, 4; Tenth Ann. Rept. U. S.  
Geol. Surv., 1890, p. 636, pl. 84, figs. 1-1g; pl. 85, figs. 1-1g;  
pl. 86, figs. 1-1m, 4.  
See *Olenellus howelli*.

8573. **Olenellus howelli** (Meek ms.) White. Cotypes and  
15411. plesiotype.  
15412. Lower Cambrian. Pioche, and Prospect Peak, Eureka  
District, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 8; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 47, pl. 2, figs. 4a, 4b.—Walcott, Mon. VIII, U. S. Geol.  
Surv., 1884, p. 30, pl. 9, figs. 15-15b; pl. 21, figs. 1-9.  
=*Olenellus gilberti*.

15407. **Olenellus iddingsi** Walcott. Cotype.  
Lower Cambrian. Prospect Mountain, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 28, pl. 9, fig. 12;  
Bull. No. 30, U. S. Geol. Surv., 1886, p. 170, pl. 19, fig. 1;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 636, pl. 84, fig. 2.

15418. **Olenellus thompsoni** (Hall). Plesiotype.  
15419. Lower Cambrian. Parker's Quarry, Georgia, and two  
miles east of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 167, pl. 17, figs.  
1, 2, 4, 9; pls. 22, 23, fig. 1; Tenth Ann. Rept. U. S. Geol.  
Surv., 1890, p. 635, pl. 82, figs. 1, 1a; pl. 83, figs. 1-1b.

15399. **Olenellus (Mesonacis) vermontana** (Hall). Plesiotype.  
Lower Cambrian. Georgia, Vermont.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 637, pl. 87,  
figs. 1-1b.  
=*Mesonacis vermontana*.

24604. **Olenoides curticei** Walcott. Cotypes  
Middle Cambrian. Near Blaine, Coosa Valley, Alabama  
Walcott, Proc. U. S. Nat. Mus., XI, 1888, p. 443, text fig. 1  
p. 444.



18452. **Olenoides (Dorypyge) desiderata** Walcott. Cotypes.  
Lower Cambrian. Highgate Springs, Vermont.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 644, fig. 67  
on p. 645.
18450. **Olenoides ellsii** Walcott. Cotypes.  
Lower Cambrian. Near Quebec, Canada.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 642, fig. 66  
on p. 644.
8563. **Olenoides? flagricaudus** White. Holotype.  
15452. Middle Cambrian. Schellbourne, Schell Creek Range,  
Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 185, pl. 25, fig. 4.  
= *Zacanthoides flagricaudus*.  
See *Dicelloccephalus? flagricaudus*.
17450. **Olenoides fordi** Walcott. Cotype.  
Lower Cambrian. Near North Granville, Washington  
County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 195, figs. 5, 5b;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 641, pl. 94, figs.  
3, 3b, 3c.
15445. **Olenoides levis** Walcott. Cotypes.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 187, pl. 25,  
figs. 3, 3a.  
= *Zacanthoides levis*.
15446. **Olenoides? marcoui** (Whitfield). Plesiotype.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 186, pl. 26, figs.  
5-5b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 642, pl. 94,  
figs. 2-2b.
15453. **Olenoides nevadensis** (Meek). Holotype.  
Middle Cambrian. House Range, Antelope Spring, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 181, pl. 25, fig. 7.  
See *Paradoxides? nevadensis*.
15449. **Olenoides quadriceps** (Hall and Whitfield). Cotype and  
plesiotype.  
Lower Cambrian. Ute Peak, Utah, and Prospect Peak,  
Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 187, pl. 29,  
figs. 1-1c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 646,  
pl. 94, figs. 4-4d.  
See *Dicelloccephalus quadriceps*.



15451. **Olenoides spinosus** (Walcott). Holotype and plesiotype.  
Middle Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 184, pl. 25,  
figs. 6, 6a.  
= *Zacanthoides spinosus*.  
See *Ogygia?* *spinosa*.
15454. **Olenoides typicalis** Walcott. Cotype.  
Middle Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 183, pl. 25,  
figs. 2, 2a, 2b.  
= *Zacanthoides typicalis*.
15447. **Olenoides wahsatchensis** (Hall and Whitfield). Cotype.  
Middle Cambrian. Box Elder Canyon, Wahsatch Moun-  
tains, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 189, pl. 29,  
figs. 2, 2a.  
See *Dicelloccephalus wahsatchensis* and *D.?* *gothicus*.
111639. **Oliva carolinensis** (Conrad). Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 109, pl. 19,  
fig. 8.
113971. **Oliva liodes** Dall. Holotype.  
Oligocene. Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 58, fig. 1.
113974. **Oliva (Omogymna) martensii** Dall. Holotype.  
Oligocene. Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 58, fig. 4.
107090. **Oliva plicata** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 308, pl. 30, fig. 12.
33076. **Olivanites globosus** Troost. Chirotype.  
Devonian? Bedford County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
33075. **Olivanites verneuillii** Troost. Chirotypes.  
Middle Devonian. Falls of the Ohio, and Bedford County,  
Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.  
= *Nucleocrinus verneuilli*.



114305. **Olivella eutacta** Dall. Holotype.  
Oligocene. One mile below Baileys Ferry, Chipola River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
pl. 58, fig. 3.
107089. **Olivella indivisa** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 308, pl. 30, fig. 10.
112092. **Olivella lata** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 45,  
pl. 4, fig. 8b.
45943. **Omospira alexandra** (Billings). Plesiotypes.  
45944. Black River (Ord.). Curdsville, Mercer County, Ken-  
tucky.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 946, pl. 70, figs. 66, 67.
45945. **Omospira laticincta** Ulrich. Holotype.  
Black River (Ord.). Near Lebanon, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 945, pl. 70, figs. 64, 65.
28196. **Oncoceras arcticum** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 172, pl. 14, figs.  
4-7.
28120. **Oncoceras tumidum** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 172, pl. 14, figs.  
1-3.
112190. **Opalia de-bouryi** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
p. 158; Pt. II, 1892, p. 244, pl. 20, fig. 13.
45946. **Ophiletina angularis** Ulrich and Scofield. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1031, pl. 74, figs. 43-46.
45947. **Ophiletina sublaxa** Ulrich and Scofield. Cotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1030, pl. 74, figs. 40, 41.
46070. **Ophiletina sublaxa depressa** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., Pt. II,  
1897, p. 1030, pl. 74, fig. 42.



45948. **Ophiletina sublaxa sequens** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1031.
7820. **Ophioderma ? bridgerensis** Meek. Holotype.  
Cretaceous. Four miles north of Fort Ellis, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 475, and footnote (also calls it *Ophiolepis bridgerensis*).—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 8, pl. 12, fig. 12a.  
= *Ophioglypha bridgerensis*.
7820. **Ophioglypha bridgerensis** (Meek). Holotype.  
Cretaceous. Four miles north of Fort Ellis, Montana.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 29, pl. 4, figs. 2a-b.  
See *Ophioderma ? bridgerensis*.
21884. **Ophioglypha texana** Clark. Cotypes.  
Washita (Lower Cret.). Six miles north of Fort Worth, Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 30, pl. 4, figs. 1a-c.
25490. **Ophryastes grandis** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 37, pl. 8, fig. 7.
25488. **Ophryastes petrarum** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 37, pl. 8, fig. 10.
25491. **Ophryastites cinereus** Scudder. Holotype.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 39, pl. 8, fig. 12.
25493. **Ophryastites digressus** Scudder. Holotype.  
Older Tertiary. White River, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 39, pl. 9, fig. 2.
25492. **Ophryastites dispertitus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 40, pl. 9, fig. 3.
23055. **Opis californica** Stanton. Cotypes.  
Knoxville (Lower Cret.). Stephenson, Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 58, pl. 7, figs. 1-4.
46262. **Opisthoptera alternata** Ulrich. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 644, 645, text figs. 9, 11.



46263. **Opisthoptera ampla** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 647, pl. 47, fig. 7.
46264. **Opisthoptera casei** (Meek and Worthen). Plesiotypes.  
46265. Richmond (Ord.). Near Lebanon, Marion County, Kentucky; Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 643, pl. 49, figs. 1-5.
46266. **Opisthoptera extenuata** Ulrich. Holotype.  
Richmond (Ord.). Warren County, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 645, text fig. 2a-d.
46267. **Opisthoptera fissicosta** Meek. Plesiotype.  
Richmond (Ord.). Clarksville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 643, pl. 49, fig. 15.
46268. **Opisthoptera laticostata** Ulrich. Holotype.  
Richmond (Ord.). Near Waynesville, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 646, pl. 47, fig. 6.
46269. **Opisthoptera notabilis** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 648, pl. 49, fig. 16.
46270. **Opisthoptera obliqua** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 646, pl. 49, figs. 6-8.
43303. **Orbignyella lamellosa** (Ulrich). Figured section and fragment of holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 20, pl. 6, fig. 10.  
See Monticulipora lamellosa.
43174. **Orbignyella sublamellosa** Ulrich and Bassler. Holotype and figured sections.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 19, pl. 6, figs. 7-9.
112218. **Orthaulax gabbi** Dall. Cotypes.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 170, pl. 12, figs. 5, 5a, 5b.
112075. **Orthaulax pugnax** (Heilprin). Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 170, pl. 8, figs. 5, 8.



9826. **Orthis arachnoides** Hall? Plesiotype.  
Carboniferous? Texas. Exact locality not given.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
pl. 20, figs. 3a, 3b.  
[Either Schuchertella or Streptorhynchus, possibly of the Lower  
Carboniferous of the El Paso region, Texas.]
8547. **Orthis biferata lynx** (Eichwald). Plesiotypes.  
Richmond (Ord.). Silver City, New Mexico.  
White, Rept. U. S. Geol. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 74, pl. 4, figs. 9a, 9b.  
= *Platystrophia lynx*.
6835. **Orthis carbonaria** Swallow. Plesiotypes.  
Upper Carboniferous. Rock Bluff near Nebraska City,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 173,  
pl. 1, figs. 8a-c.  
= *Rhipidomella pecosi*.  
See *Orthis pecosi*.
17887. **Orthis disparilis** Conrad. Plesiotype.  
Trenton (Ord.). Turkey River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 2 B,  
fig. 23.  
= *Dalmanella testudinaria*.
24596. **Orthis eurekaensis** Walcott. Cotypes.  
Middle Cambrian. Secret Canyon, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 22, pl. 9, figs. 8, 8a.  
= *Orthis* (*Orusia*?) *eurekaensis*.
17259. **Orthis hamburgensis** Walcott. Cotypes.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 73, pl. 11, figs. 5, 5a.  
= *Dalmanella hamburgensis*.
24363. **Orthis harttii** Rathbun. Cotypes.  
Middle Devonian. Rio Maecuru, Brazil.  
Rathbun, Proc. Boston Soc. Nat. Hist., XX, 1878, p. 23.  
= *Rhipidomella harttii*.
15355. **Orthis ? highlandensis** Walcott. Cotype.  
Lower Cambrian. Near Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 119, pl. 8, figs.  
3-3b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 612, pl. 72,  
figs. 5-5b.  
= *Billingsella highlandensis*.



4800. *Orthis hipparionyx* Hall. Plastotype.  
Oriskany. Lower Dev. Albany County, New York.  
Hall, Nat. Hist. New York, Vol. III, 1882, p. 497, pl. 90, fig. 6.  
= *Hipparionyx proximus*.
4807. *Orthis impressa* Hall. Plastotype.  
Middle Devonian. Eschsch District, Nevada.  
Walcott, Mem. VIII, U. S. Geol. Surv., 1882, p. 115, pl. 13, fig. 13.  
= *Schizophoria impressa*.
4812. *Orthis iowensis* Hall? Plastotypes.  
Base of Upper Devonian. Clear Water River, Mackenzie  
River Basin, Canada.  
Mack. Trans. Chicago Acad. Sci., 1905, p. 21, pl. 12, figs. 22-4.  
Probably *Orthis Schizophoria striatula*.  
See *Orthis iowensis*?
4818. *Orthis lentiformis* Hall? Plastotype.  
Middle Devonian. Near New Berlin, Iowa.  
Coker, Rept. Geol. Surv. W. S. Iowa and Minn., 1882, pl. 3, figs.  
21-22.  
= Young specimen of *Orthis Schizophoria striatula*.  
See *Orthis iowensis*?
4822. *Orthis iowensis* Walcott. Holotype.  
Upper Devonian. Lake Michigan, Nevada.  
Walcott, Mem. VIII, U. S. Geol. Surv., 1882, p. 115, pl. 13, figs. 5, 6.  
= *Heterostrophia iowensis*.
4827. *Orthis macularius* Meek. Cotypes.  
Base of Upper Devonian. Clear Water River and Deer Fort  
River Basins, Mackenzie River, Canada.  
Meek, Trans. Chicago Acad. Sci., 1905, p. 21, pl. 12, figs. 1-4.  
= *Schizophoria macularius*.
4832. *Orthis Diarrhina meeki* from Schuchert. Cotypes.  
Devonian. Eschsch District, Nevada.  
Schuchert, Proc. U. S. Nat. Mus., XIII, 1900, p. 157, pl. 12,  
figs. 1-4.
4842. *Orthis mitchellii nevadensis* Meek. Cotypes.  
Upper Carboniferous. White Pine County, Nevada.  
Meek, Rept. U. S. Geol. Surv., 1900, p. 11, pl. 1, figs. 1-4.  
= *Rhynchonella nevadensis*.
4848. *Orthis muricata* Hall. Plastotype.  
Oriskany. Lower Dev. Albany County, New York.  
Hall, Nat. Hist. New York, Vol. III, 1882, p. 497, pl. 90, fig. 7.  
= *Rhynchonella muricata*.



8546. ***Orthis occidentalis* Hall.** Plesiotypes.  
Richmond (Ord.). Silver City, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 70, pl. 4, figs. 11a, 11b.  
See *Orthis subjugata*.
8463. ***Orthis pecosi* Marcou.** Plesiotypes.  
Upper Carboniferous. Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 125, pl. 9, figs. 5a-5e.  
= *Rhipidomella pecosi*.  
See *Orthis carbonaria*.
17235. ***Orthis perveta* Conrad.** Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 72, pl. 11, figs.  
3-b.  
= *Dalmanella subæquata pervetus*.
8553. ***Orthis plicatella* Hall?** Plesiotypes.  
Pogonip (Ord.). Fossil Butte, near Hico, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 72, pl. 4, figs. 10a-10d.  
= *Orthis tricenaria* var.
17242. ***Orthis pogonipensis* Hall and Whitfield.** Cotypes.  
Pogonip (Ord.). Pogonip Mountain, White Pine District,  
Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 232, pl. 1, figs. 9-10.  
= *Dalmanella pogonipensis*.  
See *Strophomena nemea*.
35215. ***Orthis* (?) *remnicha* Winchell.** Plesiotypes.  
Gallatin (Upper Cambrian). Gallatin Range, Yellowstone  
National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 451, pl.  
61, figs. 3, 3a; pl. 62, figs. 1, 1a-d.  
= *Plectorthis remnicha*.
14231. ***Orthis resupinata* (Martin)?** Plesiotypes.  
Lower Carboniferous. Dry Canyon, Oquirrh Mountains,  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt.  
II, 1877, p. 265, pl. 5, figs. 1, 2.  
= *Schizophoria resupinata*.
9443. ***Orthis resupinoides* Cox?** Plesiotype.  
Upper Carboniferous. Manuelitos Creek, New Mexico  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III,  
1881, p. 23, pl. 3, figs. 2a, 2b.  
= *Schizophoria resupinoides*.



17443. **Orthis salemensis** Walcott. Cotype.  
Lower Cambrian. Near Salem, Washington County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 190, pl. 1, figs. 17, 17a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 612, pl. 72, figs. 6, 6a.  
= *Billingsella salemensis*.
35214. **Orthis (?) sandbergi** Winchell. Plesiotypes.  
Gallatin (Upper Cambrian). Elk Pass, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 452, pl. 61, figs. 2, 2a-d.  
= *Billingsella (Otusia) sandbergi*.
17885. **Orthis subjugata** Hall? Plesiotypes.  
17891. Richmond (Ord.). Three miles above Savannah, Illinois.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 2 B, figs. 4, 5. (? 9).  
= *Hebertella occidentalis*.
35455. **Orthis (Dalmanella) testudinaria** Dalman. Plesiotypes.  
Trenton (Ord.). Maury County, Tennessee.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration sheet, fig. 43.  
= *Dalmanella testudinaria*.
17246. **Orthis testudinaria** Dalman. Plesiotype.  
Upper Pogonip (Ord.). East of Hamburg Mine, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 72, pl. 11, figs. 10, 10a.  
= *Dalmanella testudinaria*.  
See *Orthis disparilis*.
9346. **Orthis thiemii** White. Plesiotype.  
Kinderhook (Miss.). Burlington, Iowa.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 164, pl. 41, fig. 4d.  
= *Rhipidomella thiemii*.
17252. **Orthis tricenaria** Conrad. Plesiotype.  
17253. Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 74, pl. 11, figs. 4, 4a.
13784. **Orthis tulliensis** Vanuxem. Plesiotype.  
Middle and Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 115, pl. 2, figs. 12, 12a.  
= *Schizophoria tulliensis*.



17945. **Orthis umbraculum** Schlotheim? Plesiotype.  
Upper Carboniferous. Near mouth of Keg Creek, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 5, fig. 11.  
= *Orthotetes robusta*.
15077. **Orthis umbraculum** von Buch? Plesiotype.  
Upper Carboniferous. Leavenworth, Kansas.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 412, pl. 3, fig. 6.  
= *Orthotetes cymbula*.
1010. **Orthisina crassa** Meek and Hayden. Cotypes.  
Upper Carboniferous. Leavenworth City, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 261.  
= *Orthotetes crassus*.  
See *Hemipronites crassus*.
15359. **Orthisina festinata** Billings. Plesiotype.  
Lower Cambrian. Two miles east of Highgate Springs,  
Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 120, pl. 7, figs.  
7-7b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 613, pl.  
72, figs. 7-7b.  
= *Nisusia festinata*.
15361. **Orthisina ? transversa** Walcott. Cotypes.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 121, pl. 7, figs.  
5, 5a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 613, pl.  
72, figs. 9, 9a.  
= *Nisusia festinata transversa*.
14986. **Orthoceras aciculoides** Clarke. Holotype.  
Naples (Dev.). Cashaqua Creek, Livingston County, New  
York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 51, pl. 2, fig. 11.
14989. **Orthoceras asmodeus** Clarke. Holotype.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 30, pl. 3, fig. 3.
12516. **Orthoceras blakei** Gabb? Plesiotypes.  
Upper Triassic. Ridge above Cottonwood Canyon, West  
Humboldt Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 104,  
pl. 10, fig. 11.
17392. **Orthoceras (Camaroceras) colon** White. Holotype.  
Middle Ordovician. Fish Spring, House Range, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid.,  
p. 10 (as *O. colon*); Rept. U. S. Geogr. Surv. W.  
Merid., IV, Pt. I, 1877, p. 56, pl. 3, figs. 5a-5d.



14428. **Orthoceras eurekaensis** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 265, pl. 23, figs. 2, 2a.
14990. **Orthoceras filosum** Clarke. Cotypes.  
Naples (Dev.). Parrish Gully and Hatch Hill, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 52, pl. 2, figs. 12-14.
14020. **Orthoceras kingii** Meek. Holotype.  
Upper Devonian. White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 47, pl. 2, fig. 8.
6442. **Orthoceras lambtonense** Whiteaves. Cotypes.  
Hamilton (Dev.). Bartlett's Mills, Ontario, Canada.  
Whiteaves, Cont. to Canadian Pal., I, Pt. V, 1898, pp. 404, 405.
46528. **Orthoceras lessuri** Clarke. Cotype.  
Stones River (Ord.). Dixon, Illinois.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 785, pl. 55, fig. 8.
14992. **Orthoceras mephisto** Clarke. Holotype.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 29, pl. 3, fig. 2.
17381. **Orthoceras multicameratum** Hall? Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 86, pl. 12, fig. 3.
28192. **Orthoceras olorus baffinensis** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 169, pl. 12, figs. 19-22.
14991. **Orthoceras ontario** Clarke. Cotypes.  
Naples (Dev.). Parrish Gully, Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 51, pl. 3, fig. 1.
14012. **Orthoceras parallelum** Meek. Holotype.  
Upper Devonian. Babylon Hill, White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Parallel, IV, Pt. I, 1877, p. 48, pl. 2, fig. 9.
28194. **Orthoceras porteri** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 169, pl. 12, figs. 23-25.



14429. **Orthoceras randolphensis** Worthen? Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 265, pl. 18, fig. 17.
21713. **Orthoceras rushensis** McChesney? Plesiotype.  
Permian. Military Crossing of the Big Wichita, Baylor  
County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 22, pl. 2, figs.  
14-16.
28195. **Orthoceras scalariformis** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 170, pl. 12, figs.  
17, 18.
46271. **Orthodesma canaliculatum** Ulrich. Cotypes.  
46272. Richmond (Ord.). Spring Valley, Minnesota; Waynes-  
ville, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 520, pl. 37, figs. 7-14.
46751. **Orthodesma contractum** (Hall). Plastotype.  
Richmond (Ord.). Waynesville, Ohio.  
Hall and Whitfield, Geol. Surv. Ohio, Pal. II, 1875, p. 96, pl. 2,  
fig. 4.
46273. **Orthodesma minnesotense** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 288, fig. 14; Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1894, p. 517, pl. 37, figs. 12, 14.
46274. **Orthodesma parvum** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 660, pl. 55, figs. 19, 20.
46344. **Orthodesma saffordi** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 229, fig. 15.  
= *Whiteavesia saffordi*.
46275. **Orthodesma subangulatum** Ulrich. Cotypes.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, p. 660, pl. 55, figs. 21-23.
46276. **Orthodesma subnasutum** (Meek and Worthen). Plesiotype.  
Trenton (Ord.). Near Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 518, pl. 36, figs. 23, 24.



46290. **Orthodesma subovale** Ulrich. Holotype.  
Lorraine (Ord.). Morrow, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 82, pl. 7,  
fig. 18.  
= *Psiloconcha subovalis*.
33919. **Orthothetes chemungensis** (Conrad). Plesiotype.  
33920. Ouray (Upper Dev.). Five localities in central Colorado.  
33924. Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 40,  
33925. pl. 3, figs. 1-3; variety, pl. 3, figs. 4-6.  
= *Schuchertella chemungensis*.  
See *Streptorhynchus chemungensis*.
14221. **Orthothetes inæqualis** (Hall). Plesiotype.  
Madison (Miss.). Ogden Canyon, Utah.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 522, pl. 68,  
fig. 3.  
= *Schuchertella inæqualis*.  
See *Streptorhynchus inæqualis*.
14228. **Orthothetes inflatus** (White and Whitfield). Plesiotype.  
Waverly (Miss.). Dry Canyon, Utah.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, pl. 68, fig. 2.  
= *Schuchertella inflatus*.  
See *Streptorhynchus inflatus*.
35341. **Orthotichia schuchertensis** Girty. Holotype.  
Weber (Upper Carb.). Glenwood Springs, Colorado.  
Girty, Prof. Pap. No. 10, U. S. Geol. Surv., 1903, p. 345, pl. 1,  
figs. 10-12b.
40277. **Ortonella hainesi** Miller. Plesiotypes.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 670, pl. 53, figs. 9-15.
38100. **Oryctoblattina laqueata** Scudder. Holotype.  
Upper Coal Measures. Kansas City, Missouri.  
Scudder, Bull. No. 121, U. S. Geol. Surv., 1895, p. 133, pl. 11, fig. 2.
38103. **Oryctoblattina occidua** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1894, p. 414, pl. 3,  
fig. 3. Foss. Insects N. America, I, 1894, p. 390, pl. 21, fig. 3.
15427. **Oryctocephalus primus** Walcott. Cotype.  
Lower Cambrian. Pioche, Nevada.  
Walcott, Bull. No. 3, U. S. Geol. Surv., 1896, p. 210, pl. 20, fig.  
3. Twentieth Ann. Rept. U. S. Geol. Surv., 1900, p. 253, pl.  
28, fig. 12.



129541. **Oryctomya claibornensis** Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, *The Nautilus*, XI, 1898, p. 135; *Trans. Wagner Free Inst. Sci. Phila.*, III, Pt. IV, 1898, pl. 34, figs. 16, 16a; Pt. VI, 1903, p. 1499.
107074. **Oscilla indiscreta** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, *Proc. U. S. Nat. Mus.*, XIX, 1896, p. 317, pl. 28, fig. 14.
7823. **Ostrea anomioides** Meek. Cotypes.  
Colorado (Cret.). Missouri River, below Gallatin, Montana.  
Meek, *Sixth Ann. Rept. U. S. Geol. Surv. Terr.*, 1873, p. 488.—White, *Twelfth Ann. Rept. U. S. Geol. Surv. Terr.*, Pt. I 1883, p. 10, pl. 11, figs. 4a, 4b; *Fourth Ann. Rept. U. S. Geol. Surv.*, 1884, p. 291, pl. 39, figs. 4, 5.—Stanton, *Bull. No 106, U. S. Geol. Surv.*, 1893, p. 55, pl. 1, figs. 5, 6.
9852. **Ostrea bella** Conrad. Holotype.  
Cretaceous. Western Texas.  
Conrad, *Rept. U. S. Mexican Bound. Surv.*, Emory, II, Pt. II, 1857, p. 156, pl. 10, figs. 4a, 4b.—White, *Fourth Ann. Rept. U. S. Geol. Surv.*, 1884, p. 292, pl. 39, fig. 6.
12383. **Ostrea bellaplicata** Shumard. Plesiotypes.  
Eagle Ford (Cret.). Near Denison, Texas.  
White, *Fourth Ann. Rept. U. S. Geol. Surv.*, 1884, p. 292, pl. 47, figs. 1, 2.  
= *Ostrea lugubris*.
12383. **Ostrea (Alectryonia) bellaplicata** (Shumard). Plesiotypes.  
Eagle Ford (Cret.). Near Denison, Texas.  
White, *Eleventh Ann. Rept. U. S. Geol. Surv. Terr.*, 1879, p. 276, pl. 4, figs. 3a, 3b.  
= *Ostrea lugubris*.
8024. **Ostrea (Alectryonia) blackii** White. Cotypes.  
Cretaceous. Collin County, Texas.  
White, *Proc. U. S. Nat. Mus.*, II, 1879, p. 293; *Twelfth Ann. Rept. U. S. Geol. Surv. Terr.*, 1883, p. 11, pl. 17, fig. 5.  
= *Ostrea lugubris*.
18616. **Ostrea carinata** Lamarck. Plesiotype.  
Washita (Lower Cret.). Texas.  
White, *Fourth Ann. Rept. U. S. Geol. Surv.*, 1884, p. 293, pl. 43, figs. 2-4.
7800. **Ostrea** (undet. sp.) = **coalvillensis** Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, *Rept. U. S. Geol. Expl. 40th Par.*, IV, Pt. I, 1877, p. 140, pl. 15, figs. 10, a-c.—White, *Fourth Ann. Rept. U. S. Geol. Surv.*, 1884, p. 293, pl. 36, figs. 1-4.



18597. *Ostrea compressirostra* Say. Plesiotypes.  
Eocene. Maryland.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 309, pl. 65, figs. 1, 2.
238. *Ostrea congesta* Conrad. Plesiotypes.  
Niobrara (Cret.). Missouri River, near Niobrara, Nebraska.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 13, pl. 9, figs. 1a-e.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 294, pl. 39, figs. 11-13.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 55, pl. 2, figs. 2-4.
9904. *Ostrea contracta* Conrad. Cotypes.  
Miocene. Oyster Point, Mexico.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory I, Pt. II, 1857, p. 160, pl. 18, figs. a-d.
9871. *Ostrea cortex* Conrad. Cotypes.  
Cretaceous. Dry Creek, Mexico.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857, p. 157, pl. 11, figs. 4a-d.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 294, pl. 37, figs. 3, 4.
8642. *Ostrea cortex* Conrad. Plesiotypes.  
Cretaceous. Colob Plateau, southwest of Kanara, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 170, pl. 15, figs. 2a-c.  
= *Ostrea soleniscus*.
20253. *Ostrea cretacea* Morton. Cotypes.  
Lower Cretaceous. Hempstead County, Arkansas.  
Owen, Second Rept. Geol. Recon. Arkansas, 1860, pl. 7, figs. 3a, 3b.  
= *Ostrea franklini*.
20111. *Ostrea (Alectryonia) dilleri* White. Cotypes.  
Chico (Cret.). Near Falls of Clover Creek, Shasta County, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 14, pl. 1, figs. 1, 2; pl. 2, figs. 1, 2.
8300. *Ostrea diluviana* Linnæus. Plesiotypes.  
Cretaceous. Bell County, Texas.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 295, pl. 40, fig. 1; pl. 41, figs. 1, 2.
18611. *Ostrea elegantula* Newberry. Cotypes.  
Colorado (Cret.). Canadian River, New Mexico.  
Newberry, Rept. Expl. Exped. Santa Fé to junction of Grand and Green Riv., Macomb, 1876, p. 33.—White, Fourth Ann. Rept. U. S. Geol. Surv., p. 295, pl. 36, figs. 5-7.



681. *Ostrea engelmanni* Meek. Cotype.  
1884. Jurassic. Red Buttes, North Platte, Wyoming.

Meek, Proc. Acad. Nat. Sci. Phila. for 1860, p. 311.—Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV, 1864, p. 73, text fig. A.—Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 356, pl. 3, fig. 6.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 289, pl. 34, figs. 3, 4.

129972. *Ostrea falco* Dall. Cotypes.  
Jacksonian (Eocene). Cocoa, Choctaw County, Alabama.

Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 22; Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 682, pl. 30, figs. 4, 11.

2165. *Ostrea glabra* Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Mouth of Judith River, Montana.

Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1857, p. 146.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 509, pl. 40, figs. 2a-d.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 9, figs. 1, 2; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 307, pl. 58, figs. 1, 2.

See *Ostrea insecureis*.

11889. *Ostrea glabra* Meek and Hayden. Plesiotypes.  
Laramie? (Cret.). State of Nuevo Leon, Mexico, seven and one-half miles northwest of Lampazor.

White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 307, pl. 61, figs. 2, 3.

13407. *Ostrea glabra* Meek and Hayden. Plesiotypes.  
Laramie (Cret.). Valley of the South Platte, Colorado.

White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 9, figs. 3, 4; pl. 10, figs. 1, 2; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 307, pl. 58, figs. 3, 4; pl. 59, figs. 1, 2.

7839. *Ostrea glabra arcuatilis* (Meek). Cotypes.  
Laramie (Cret.). Near Hallville, Wyoming.

White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 10, fig. 5; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 308, pl. 59, fig. 5.

= *Ostrea arcuatilis*.

12472. *Ostrea glabra wyomingensis* (Meek). Plesiotypes.  
Laramie (Cret.). Valley of the South Platte, Colorado.

White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 11, figs. 1, 2; Fourth Ann. Rept. U. S. Geol. Surv., 1884, pl. 60, figs. 1, 2.

9062. *Ostrea glabra wyomingensis* Meek. Plesiotypes.  
Montana (Cret.). Point of Rocks, Wyoming.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 56, pl. 20, figs. 1a-c (as *O. glabra*); Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 11, figs. 3, 4; pl. 12, fig. 1; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 307, pl. 60, figs. 3, 4; pl. 61, fig. 1 (as *Ostrea glabra*).



5117. *Ostrea gregaria* Sowerby. Plesiotype.  
Jurassic. Cordillera de Dona Ana, Chile.  
Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 283,  
pl. 41, fig. 1.
23109. *Ostrea haydeni* White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 32, pl. 2, figs. 1, 2.
329. *Ostrea inornata* Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Great Bend of the Missouri below  
Fort Pierre, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 181.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 14, pl. 10,  
fig. 4.
9053. *Ostrea insecureis* White. Cotype.  
Laramie (Cret.). Point of Rocks, Wyoming.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 112;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 56,  
pl. 21, figs. 1a, b (as *O. glabra*); Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 421, pl. 10, figs. 3, 4 (as var. *insecureis*);  
Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 307, pl. 59,  
figs. 3, 4 (as var. *insecureis*).  
=*Ostrea glabra*.
5116. *Ostrea irregularis* Münster. Plesiotypes.  
Jurassic. Cordillera de Dona Ana, Chile.  
Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 283,  
pl. 42, fig. 9.
2401. *Ostrea (Alectryonia) larva* Lamarck. Plesiotypes.  
Cretaceous. Near Ameytown, New Jersey.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 296, pl. 42,  
figs. 2-9.
9822. *Ostrea lugubris* Conrad. Holotype.  
Cretaceous. East of Red River, New Mexico.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 156, pl. 10, figs. 5a, 5b.—White, Fourth Ann. Rept.  
U. S. Geol. Surv., 1884, p. 297, pl. 41, fig. 3.  
See *Ostrea (Alectryonia) bellaplicata*, and *O. (A.) blackii*.
9822. *Ostrea lugubris* Conrad. Holotype and plesiotypes.  
22859. Colorado (Cret.). Eastern New Mexico; Huerfano Park,  
to Colorado; Sherman, Texas.  
22861. Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 58, pl. 4, figs.  
1-10.
20255. *Ostrea lugubris* Conrad. Plesiotype.  
Colorado (Cret.). Vodo del Chama, New Mexico.  
Meek, Rept. Expl. Exped., Santa Fé to junction of Grand and  
Green rivers, Macomb, 1876, p. 123, pl. 1, fig. 1a.



22857. **Ostrea malachitensis** Stanton. Cotypes.  
Colorado (Cret.). Malachite, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 57, pl. 2, figs. 5-8.
9895. **Ostrea multilirata** Conrad. Cotypes.  
Cretaceous. Dry Creek, Mexico.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory I, Pt. II, 1857, p. 157, pl. 12, figs. 1a-d.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 298, pl. 38, figs. 1, 2.
13313. **Ostrea panzana** Conrad. Holotype.  
13338. Miocene. Panza and Estrella valleys, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, VII, 1857, p. 193, pl. 2, fig. 4.—Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 683.
325. **Ostrea patina** Meek and Hayden. Cotypes.  
Fort Pierre (Cret.). Missouri River, Montana, two hundred miles above Milk River.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 277.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 298, pl. 47, figs. 4-6.
325. **Ostrea (Gryphæa?) patina** Meek and Hayden. Cotypes.  
Fort Pierre (Cret.). Missouri River, Montana, two hundred miles above mouth of Milk River.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 16, pl. 10, figs. 2a, 2b (bis.), 3a, 3b; pl. 11, figs. 1, 3, 4.
330. **Ostrea pellucida** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 15, pl. 28, figs. 4a, 4b.—White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 296, pl. 50, figs. 5, 6.  
= *Ostrea translucida*.
111621. **Ostrea percrassa** Conrad. Plesiotype.  
Miocene. Near Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 29, pl. 3, figs. 1-4.
18612. **Ostrea plumosa** Morton. Plesiotypes.  
Cretaceous. New Jersey.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 299, pl. 37, figs. 5, 6.
135127. **Ostrea podagrina** Dall. Holotype.  
Upper Eocene. Near Sulphur Spring, Suwanee River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVII, 1895, p. 22; Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 682, pl. 30, figs. 5, 6.
107336. **Ostrea præ-compressirostra** Harris. Holotype.  
Midway (Eocene). Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 39.



8855. **Ostrea (Alectryonia) procumbens** White. Cotypes.  
Jurassic. Vermilion Hogbacks, Northwestern Colorado.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 290, pl. 35,  
figs. 6-7.
8639. **Ostrea prudentia** White. Cotypes.  
Colorado (Cret.). East of Impracticable Ridge, Utah.  
White, Rept. U. S. Geogr. Surv. W. of 100th Merid., IV, Pt. I,  
1876, p. 171, pl. 14, figs. 2a-d; Fourth Ann. Rept. U. S. Geol.  
Surv., 1894, p. 299, pl. 40, figs. 5, 6.—Stanton, Bull. No. 106,  
U. S. Geol. Surv., 1893, p. 54, pl. 50, figs. 3, 4.
135138. **Ostrea pulaskensis** Harris. Cotypes.  
Midway (Eocene). Pulaski County, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1894, Pt. II, p. 40, pl. 1,  
figs. 3a-d.
8077. **Ostrea quadriplicata** Shumard. Plesiotypes.  
Denison (Cret.). Denison, Texas.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, 275,  
pl. 5, fig. 6a; Fourth Ann. Rept. U. S. Geol. Surv., 1884,  
p. 299, pl. 43, fig. 5.
9885. **Ostrea robusta** Conrad. Cotypes.  
Cretaceous or Eocene? Jacun, three miles below Laredo,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 156, pl. 11, figs. 3a, 3b.—White, Fourth Ann. Rept. U. S.  
Geol. Surv., 1884, p. 300, pl. 40, figs. 3, 4.
8056. **Ostrea (Alectryonia) sannionis** White. Cotypes.  
Montana (Cret.). Valley of Weber River, near Coalville,  
Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 277,  
pl. 2, figs. 2a-e; Fourth Ann. Rept. U. S. Geol. Surv., 1884,  
p. 300, pl. 45, figs. 3-7.
18598. **Ostrea sellæformis** Conrad. Plesiotype.  
Eocene. Alabama.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 311, pl. 62,  
figs. 1, 2; pl. 63, fig. 1.
153874. **Ostrea sellæformis pauciplicata** Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 678.
129775. **Ostrea sellæformis perplicata** Dall. Cotypes.  
Eocene. Catons Bluff, Conecuh River, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 678.
114573. **Ostrea sellæformis rugifera** Dall. Cotypes.  
153875. Oligocene. Alum Bluff, Calhoun County, and Tampa,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 678.



7779. **Ostrea soleniscus** Meek. Cotypes.  
 7780. Colorado (Cret.). Near Coalville, Utah, and Bear River  
 City, Wyoming.  
 Meek, Proc. Amer. Philos. Soc., IX, 1871, p. 430; Sixth Ann. Rept.  
 U. S. Geol. Surv. Terr., 1873, p. 487.—White, Twelfth Ann.  
 Rept. U. S. Geol. Surv. Terrs., Pt. I, 1883, p. 9, pl. 11, figs.  
 2a, b; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 300,  
 pl. 42, fig 1.  
 See *Ostrea cortex*.
7780. **Ostrea soleniscus** Meek. Cotypes and plesiotypes.  
 22858. Colorado (Cret.). Coalville, Utah, and Bear River City,  
 Wyoming.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 56, pl. 2, fig. 1;  
 pl. 3, figs. 1, 2.
8581. **Ostrea strigilecula** White. Cotypes.  
 Jurassic. Two miles South of Dirty Devil River, Utah.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 163, pl. 13, figs. 3a-d; Fourth Ann. Rept. U. S. Geol. Surv.,  
 1884, p. 289, pl. 35, figs. 9-11.
12271. **Ostrea strigilecula** White. Plesiotypes.  
 12318. Jurassic. Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 348, pl. 3, figs. 8-12.
2101. **Ostrea subalata** Meek. Holotype.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 300, pl. 39,  
 fig. 10.
2101. **Ostrea (Gryphæostrea?) subalata** Meek. Holotype.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 15, pl. 28, fig. 5.
1668. **Ostrea subfalcata** Conrad. Plesiotypes.  
 Miocene. Coggins Point, Virginia.  
 White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 313, pl. 68,  
 figs. 1-3.
13338. **Ostrea subjecta** Conrad. Holotype.  
 Miocene. Sierra Monica, between Santa Clara River and  
 Los Angeles Valley, California.  
 Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
 VII, 1857, p. 193, pl. 2, fig. 3.  
 [This is a young shell and may be the same as *O. trigonalis*  
 Conrad. W. H. Dall.]
9867. **Ostrea subspatulata** Lyell and Sowerby. Plesiotypes.  
 Cretaceous. Western Texas.  
 Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
 1857, p. 155, pl. 10, figs. 3a, 3b.



8386. *Ostrea subtrigonalis* Evans and Shumard. Plesiotypes.  
Laramie (Cret.). Upper Missouri River.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 421, pl. 12,  
figs. 2-5; Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 308,  
pl. 61, figs. 4-7.
2172. *Ostrea subtrigonalis* Evans and Shumard? Plesiotypes.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 510, pl. 40,  
figs. 1a-d.
18613. *Ostrea tecticostata* Gabb. Plesiotypes.  
Cretaceous. Eufaula?, Alabama.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 301, pl. 1,  
figs. 3, 4.
570. *Ostrea thirsae* Gabb. Plesiotype.  
Eocene. Eufaula, Alabama.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 311, pl. 63,  
figs. 4-6.
330. *Ostrea translucida* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 147.  
See *Ostrea pellucida*.
20262. *Ostrea (Gryphæa) uniformis* Meek. Holotype.  
Colorado (Cret.). Pagosa Springs, Colorado.  
Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and  
Green Rivers, Macomb, 1876, p. 124, pl. 1, figs. 2a-c.
20262. *Ostrea uniformis* (Meek). Holotype.  
Colorado (Cret.). Pagosa Springs, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 59, pl. 3, figs.  
3, 4.
9902. *Ostrea veleniana* Conrad. Holotype.  
Tertiary. Rancho Helena, below Salado, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 160, pl. 17, figs. 2a, 2b.—White, Fourth Ann. Rept.  
U. S. Geol. Surv., 1884, p. 314, pl. 70, fig. 1 (as *O. veberiana*).
9833. *Ostrea vellicata* Conrad. Holotype.  
Washita? (Lower Cret.). Rio Grande between El Paso  
and Frontera.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 156, pl. 11, figs. 2a, 2b.
20252. *Ostrea vesicularis* Lamarck. Plesiotype.  
Cretaceous. Hempstead County, Arkansas.  
Owen, Second Rept. Geol. Recon. of Arkansas, 1860, pl. 8, fig. 6.



9832. **Ostrea vespertina** Conrad. Cotypes.  
Miocene. Carriso Creek, and near San Diego, California.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 160, pl. 17, figs. 1a-d.—White, Fourth Ann. Rept.  
U. S. Geol. Surv., 1884, p. 315, pl. 71, figs. 2-5.
111623. **Ostrea virginiana** (Gmel.). Plesiotype.  
Miocene. Near Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 27, pl. 11,  
figs. 1-6.
111623. **Ostrea virginiana procyon** Tuomey and Holmes. Plesiotype.  
Miocene. Near Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 28, pl. 1,  
figs. 4-5.  
= *Ostrea georgiana mauricensis*.
2414. **Ostrea vomer** Morton. Plesiotypes.  
Cretaceous. New Egypt, New Jersey.  
White, Fourth Ann. Rept. U. S. Geol. Surv., 1884, p. 302, pl. 48,  
figs. 8-10.
9062. **Ostrea wyomingensis** Meek. Cotypes.  
Montana (Cret.). Point of Rocks, Wyoming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 508.
25495. **Otiorhynchites absentivus** Scudder. Holotype.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 46, pl. 9, fig. 13.
25515. **Otiorhynchites commutatus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 48, pl. 9, fig. 9.
25516. **Otiorhynchites fossilis** Scudder. Holotype.  
Older Tertiary. Fossil, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 47, pl. 8, fig. 9.
25513. **Otiorhynchites tysoni** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 47, pl. 9, fig. 12.
25496. **Otiorhynchus flaccus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 45, pl. 9, fig. 5.
25497. **Otiorhynchus subteractus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 45, pl. 9, fig. 8.



112450. **Ovula (Transovula) multicarinata** Dall. Holotype.  
Upper Eocene. Martin Station, Marion County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 164,  
pl. 10, figs. 10, 11.
115598. **Ovulum immunitum** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 409, pl. 16, fig. 7.
- 45949 **Oxydiscus cristatus** (Safford). Cotypes.  
to Trenton (Ord.). Nashville, Jackson County, and Linds-  
45951. leys Hill, near Lebanon, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 914, pl. 82, figs. 26-28.  
See *Cyrtolites cristatus*.
45952. **Oxydiscus subacutus** Ulrich. Cotypes.  
Trenton (Ord.). Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 913, pl. 62, figs. 62-65; pl. 82, figs. 23-25.
13315. **Pachydesma inezana** Conrad. Holotype.  
13349. Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 193, pl. 5, figs. 2, 4.
43721. **Pachydictya acuta** (Hall). Plesiotypes.  
44099. Trenton (Ord.). Near Cannon Falls, Minnesota, and  
Trenton Falls, New York.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 155, pl. 8, figs. 11, 12, 14, 17; pl. 9, fig. 7.  
See *Stictopora acuta*.
43583. **Pachydictya elegans** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 154, pl. 8, figs. 18, 19; pl. 9, figs. 8, 9.
43429. **Pachydictya everetti** Ulrich. Holotype and figured sections.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 523, pl. 33, figs. 1-1f.
43581. **Pachydictya fimbriata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 152, pl. 8, figs. 28-34; pl. 9, figs. 13, 14.
43783. **Pachydictya firma** Ulrich. Figured sections of cotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 525, pl. 31, figs. 2b, 2c, 2d, 2f.



43584. **Pachydictya foliata** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 149, pl. 9, figs. 1-5; pl. 10, figs. 5-10.
43784. **Pachydictya gigantea** Ulrich. Figured sections of cotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 524, pl. 31, figs. 3b-3e.
43473. **Pachydictya hexagonalis** Ulrich. Figured sections and frag-  
ment of holotype.  
Richmond (Ord.). Stony Mountain, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal., Cambro-Sil., Pt.  
II, 1889, p. 42, pl. 9, figs. 2-2c.
43582. **Pachydictya occidentalis** Ulrich. Cotypes and figured  
sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 151, pl. 8, figs. 20-27; pl. 9, figs. 6-10.
43702. **Pachydictya pumila** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 186, figs.  
11, 11a-d; Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. I, 1893, p. 157, pl. 8, figs. 4, 5; pl. 10, figs. 1-4.  
See *Rhinidictya humilis*.
43585. **Pachydictya pumila sublata** Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 158.
43701. **Pachydictya robusta** Ulrich. Cotypes and figured sections.  
Sevier (Ord.). Near Knoxville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 173, pl. 8,  
figs. 10, 10a-c.
43785. **Pachydictya splendens** Ulrich. Figured section of cotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 523, pl. 32, fig. 1b.
43703. **Pachydictya triserialis** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Montreal, Canada.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 187,  
figs. 1a, 12a-c; Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. I, 1893, p. 159, pl. 10, figs. 11-14.
41824. **Pachydomella tumida** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p.  
pl. 13, figs. 5a-c.



3590. **Pachydomus antiquatus** (Sowerby). Plesiotypes.  
Carboniferous. Harpers Hill, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 693, Atlas, pl. 5,  
fig. 2.
25534. **Pachylobius compressus** Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 90, pl. 10, fig. 11.
25535. **Pachylobius delecticius** Scudder. Holotype.  
Older Tertiary. White River, Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 90, pl. 10, fig. 14.
25536. **Pachylobius deprædatus** Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 91, pl. 10, fig. 12.
8153. **Pachymelania chrysalis** (Meek). Cotypes and plesiotypes.  
23111. Bear River (Cret.). Sulphur Creek, and Sage Station,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 51, pl. 7, figs. 6,  
7, 8, 12, 13.  
See *Goniobasis chrysalis*.
8157. **Pachymelania chrysalloidea** (White). Cotypes and  
plesiotypes.  
Bear River (Cret.). Sulphur Creek, and near Evanston,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 52, pl. 7, figs. 4, 5.  
See *Goniobasis chrysalloidea*.
8152. **Pachymelania cleburni** (White). Cotypes and plesiotypes.  
23112. Bear River (Cret.). Bear River Valley, near mouth of  
Sulphur Creek, and seven miles north of Evanston,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 51, pl. 7, figs. 1-3.  
See *Goniobasis cleburni*.
19016. **Pachymelania? macilenta** (White). Holotype and  
22253. plesiotypes.  
Bear River (Cret.). Sulphur Creek, and near Evanston,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 54, pl. 7, figs. 9-11.  
See *Goniobasis macilenta*.
22315. **Pachymelania turricula** White. Holotype.  
Bear River (Cret.). Sulphur Creek, and Sage Station,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 53, pl. 7, figs. 14, 15.



8043. **Pachymya austinensis** Shumard. Plesiotypes.  
Washita (Cret.). Salado, Bell County, Texas.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 298,  
pl. 8, fig. 1b.
8027. **Pachymya? compacta** White. Holotype.  
Cretaceous. Bell County, Texas.  
White, Proc. U. S. Nat. Mus., II, 1879, p. 297, pl. 6, figs. 3, 4;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 22, pl.  
17, figs. 4a, b.
8091. **Pachymya? herseyi** White. Cotypes.  
Fox Hills (Cret.). Near confluence of St. Vrain with  
South Platte, northern Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 298,  
pl. 5, figs. 5a, 5b.
7813. **Pachymya? truncata** Meek. Holotype.  
Cretaceous. Salt Lake, Utah.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 301.  
= *Trapezium truncatum*.
45953. **Palæacmæa humilis** Ulrich and Scofield. Cotypes.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 837, pl. 61, figs. 45, 46.
40887. **Palæaster harrisi** Miller. Holotype.  
Richmond (Ord.). Near Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 117, pl. 10,  
figs. 2, 2a.  
= *Urasterella grandis*.
40881. **Palæaster longibrachiatus** Miller. Holotype.  
Richmond (Ord.). Near Clarksville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 102, pl. 3, fig. 4.
40883. **Palæaster magnificus** Miller. Holotype.  
Richmond (Ord.). Near Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 16, pl. 4,  
figs. 3, 3a.
40880. **Palæaster miamiensis** Miller. Holotype.  
Richmond (Ord.). Near Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., III, 1880, p. 143, pl. 4,  
fig. 3.
38032. **Palæocampa anthrax** Meek and Worthen. Plesiotypes.  
Upper Coal Measures. Mazon Creek, Grundy County  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1882, p. 293, p.  
figs. 6, 7; Foss. Insects N. America, I, 1890, pp. 258-9, p.  
figs. 6, 7.



38850. **Palæocaris typus** Meek and Worthen. Plesiotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Mem. Nat. Acad. Sci., IV, 1886, p. 129, pl. 7, fig. 2.
24584. **Palæochorda prima** Whitfield. Cotypes.  
Upper Cambrian. Head of Redwater Valley, Black Hills,  
South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 331, pl. 1, fig. 2.
24334. **Palæoneilo sulcata** Hartt and Rathbun. Cotype.  
Middle Devonian. Ereré, Para, Brazil.  
Hartt and Rathbun, Ann. Lyceum Nat. Hist. N. Y., XI, 1875, p.  
124.
24582. **Palæophycus occidentalis** Whitfield. Cotypes.  
Upper Cambrian. Head of Redwater Valley, Black Hills,  
South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 332, pl. 1, fig. 3.
38002. **Palenarthrus impressus** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 422, pl. 38,  
fig. 4; Foss. Insects N. America, I, 1890, p. 398, pl. 30, fig. 4.
8081. **Paliurus pentangulatus** White. Holotype.  
Fox Hills (Cret.). Monument Creek, near Colorado  
Springs, Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 302,  
pl. 4, figs. 4a, 4b.
13317. **Pallium estrellanum** Conrad. Cotype.  
Miocene. Estrella, California.  
Conrad, Rept. Expl. and Surveys R. R. Miss. Riv. to Pacific  
Ocean, VII, 1857, p. 191.—Dall, Trans. Wagner Free Inst. Sci.  
Phila., III, Pt. IV, 1898, p. 701.  
= Pecten (Lyropecten) hermanni.  
See Pecten hermanni.
25478. **Paltorhynchus ? bisulcatus** Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 19, pl. 8, fig. 3.
162542. **Paludestrina curta** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 305, pl. 8, fig. 2.
162541. **Paludestrina stokesi** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 306, pl. 8, fig. 3.



2156. **Paludina conradi** (Meek and Hayden). Holotype and paratypes.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 122.  
= *Viviparus conradi*.
2154. **Paludina leai** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Three miles below Fort Clark, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 121.  
= *Viviparus leai*.
12476. **Paludina leidy** Meek and Hayden. Holotype.  
Laramie (Cret.). Ten miles below Fort Union, North Dakota. (Specimen labeled mouth of Yellowstone.)  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 123.  
= *Viviparus leidy*.
2154. **Paludina multilineata** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Fort Clark, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 120.  
= *Campeloma multilineata*.
2157. **Paludina peculiaris** Meek and Hayden. Cotypes.  
Laramie (Cret.). Fort Clark, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 122.  
= *Viviparus peculiaris*.
2155. **Paludina retusa** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Mouth of Yellowstone River, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 122.  
= *Viviparus retusus*.
2158. **Paludina trochiformis** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Ten miles below Fort Union, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 122.  
= *Viviparus trochiformis*.
2153. **Paludina vetula** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856.  
= *Campeloma vetula*.



109290. **Pandora (Kennerleyia) arctica** Dall. Holotype.  
Pleistocene. Saco, Maine.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1520, pl. 57, fig. 26.
135848. **Pandora (Kennerleyia) dodona** Dall. Holotype.  
Uppermost Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1518, pl. 57, fig. 25.
11875. **Pandora (Kennerleyia) lata** Dall. Holotype.  
Miocene. St. Mary's County (?), Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1520, pl. 57, fig. 18.
1018. **Panopæa cooperi** Meek and Hayden. Holotype.  
Upper Carboniferous. Near Helena, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 83.  
= *Chænomya cooperi*.  
See *Allorisma ? cooperi*.
111584. **Panopæa goldfussi** Wagner. Cotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 89, pl. 16, figs. 9-13.  
= *Panopea whitfieldi*.
180. **Panopæa occidentalis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Near mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 270.  
= *Glycymeris occidentalis*.
200. **Panopæa (Myacites) subelliptica** Meek and Hayden. Cotypes.  
Jurassic. Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 52.  
= *Myacites subellipticus*.
38100. **Paolia lacoana** Scudder. Cotypes.  
Upper Coal Measures. Near Pittston, Pennsylvania.  
Scudder, Proc. Amer. Acad. Arts and Sci., XX, 1885, p. 173.
164867. **Papyridea harrimani** Dall. Holotype.  
Miocene. Popof Island, Shumagins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 114, pl. 10, fig. 5.
158174. **Paracyathus alternatus** Vaughan. Holotype and paratypes.  
158189. Claibornian (Eocene). Bienville Parish, Louisiana, New-  
158191. ton, Mississippi, and Sowilpa Creek, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 105, pl. 8, figs. 11, 11a, 13-14b.



158193. **Paracyathus bellus** Vaughan. Cotypes.  
158194. Claibornian (Eocene). Clarke County, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 108, pl. 8,  
figs. 16-20.
158209. **Paracyathus cylindricus** Vaughan. Cotypes.  
Midwayan? (Eocene). Wilcox County, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 109, pl. 9,  
figs. 1-1b.
158192. **Paracyathus granulosis** Vaughan. Holotype.  
Woods Bluff (Eocene). Woods Bluff, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 107, pl. 8,  
figs. 15-15b.
164738. **Paracyathus pedroënsis** Vaughan. Holotype.  
Pleistocene. San Pedro, California.  
Vaughan in Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 88, pl. 3,  
figs. 1, 1a.
158210. **Paracyathus rugosus** Vaughan. Holotype.  
Woods Bluff (Eocene). Woods Bluff, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 109, pl. 8,  
figs. 21-21b.
15186. **Paracyclas peroccidens** Hall and Whitfield. Cotypes.  
Upper Devonian. Treasure Hill, White Pine District,  
Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 248, pl. 3, figs. 14-17.
13673. **Paracyclas sabini** White. Cotype.  
9279. Upper Devonian. Rockford, Iowa.  
White, Proc. Acad. Nat. Sci. Phila., 1876, p. 31.
4888. **Paradoxides boltoni** Bigsby. Plastotype.  
Lockport (Sil.). Lockport, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 60. Cast  
No. 60.  
= *Lichas boltoni*.
4931. **Paradoxides harlani** Green. Plastotype  
Middle Cambrian. Braintree, Massachusetts.  
Green, Suppl. Mon. Trilobites N. America, Phila., 1835, p. 14.  
Cast No. 39.
15453. **Paradoxides ? nevadensis** Meek. Holotype.  
Middle Cambrian. Antelope Spring, House Range, Ut  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p.  
pl. 1, fig. 5.  
= *Olenoides nevadensis*.



21706. **Paralegoceras baylorensis** (White). Holotype.  
Permian. Military crossing of the Big Wichita, Baylor  
County, Texas.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 99, pl. 4, figs. 9-11.  
See *Goniatites baylorensis*.
8360. **Paramithrax? walkeri** Whitfield. Plastotype.  
Cretaceous. San Antonio, Texas.  
White, Twelfth Ann. Rept., U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 37, pl. 16, figs. 1a-c; pl. 17, fig. 1a.
12380. **Parapholas sphenoideus** (White). Cotypes.  
Colorado (Cret.). Upper Kanab, Southern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 300,  
pl. 5, figs. 1a-d.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
1893, p. 125, pl. 27, figs. 1, 2.
158217. **Parasmilia ludoviciana** Vaughan. Cotypes.  
158218. Jacksonian (Eocene). Montgomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 113, pl. 9,  
figs. 6-13.
38044. **Paromylacris ampla** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 408, pl. 31,  
fig. 7; Foss. Insects N. America, I, 1890, p. 384, pl. 23, fig. 7;  
Bull. 124, U. S. Geol. Surv., 1895, p. 51, pl. 3, fig. 4.
38161. **Paromylacris clintoniana** Scudder. Holotype.  
Upper Coal Measures. Near Clinton, Missouri.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 53, pl. 3, fig. 6.
38048. **Paromylacris? pluteus** Scudder. Holotype.  
Upper Coal Measures. Butler Mine, Pittston, Pennsyl-  
vania.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 54, pl. 3, fig. 2.
38047. **Paromylacris rotunda** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 406, pl. 32,  
figs. 1, 2; Foss. Insects N. America, I, 1890, p. 382, pl. 24,  
figs. 1, 2.
38046. **Paromylacris triangularis** Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 52, pl. 3, fig. 3.
9396. **Patella levettei** White. Holotype.  
St. Louis (Miss.). Spergen Hill, Indiana.  
White, Eleventh Ann. Rept. Indiana Dept. Geol. and Nat. Hist.,  
1882, p. 359, pl. 39, figs. 4, 5.



46565. **Pattersonia difficilis** Miller: Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Rauff, Palaeontographica, XL, 1894, p. 268, pl. 6, figs. 17-19.
46566. **Pattersonia ulrichi** Rauff. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Rauff, Palaeontographica, XL, 1894, p. 271, pl. 6, fig. 21.
5107. **Pecten ? (Neithea) alatus** (Von Buch). Plesiotype.  
Jurassic. Cerro de Tres Cruces, Coquimbo, Chile.  
Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 283,  
pl. 41, fig. 2.
13350. **Pecten altiplicatus** Conrad. Holotype.  
Miocene. San Raphael Hills, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Survs. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 191, pl. 3, fig. 2.—Dall, Trans. Wagner Free Inst.  
Sci. Phila., III, Pt. IV, 1898, p. 700.  
= *Pecten (Chlamys) altiplicatus*.
114580. **Pecten (Chlamys) alumensis** Dall. Cotypes.  
Oligocene. Alum Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 740,  
pl. 34, figs. 10, 11.
680. **Pecten bellistriata** Meek. Cotypes.  
Jurassic. Red Buttes, North Platte, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 311.  
= *Camptonectes bellistriatus*.
135782. **Pecten (Euvola) bowdenensis** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 713,  
pl. 29, fig. 1.
114781. **Pecten (Pecten) burnsii** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 720,  
pl. 34, fig. 8.
135058. **Pecten (Chlamys) cactaceus** Dall. Holotype.  
Tertiary. Near Atlantic terminus of Tehuantepec Rail-  
road.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 716,  
pl. 34, fig. 2.
23026. **Pecten californicus** Gabb? Plesiotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb.),  
pl. 2, fig. 10.



107756. **Pecten Nodipecten caloosaensis** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 731,  
pl. 29, fig. 12.
114784. **Pecten Aequipecten chipolanus** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Calhoun County, Florida.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 733,  
pl. 29, fig. 9.
87754. **Pecten Chlamys coccymelus** Dall. Holotype.  
Miocene. Plum Point, Maryland.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 741,  
pl. 34, fig. 1.
141025. **Pecten Chlamys cocoanus** Dall. Holotype.  
Jacksonian-Eocene. Cocoa, Choctaw County, Alabama.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 732,  
pl. 34, fig. 23.
- 61246b. **Pecten Pecten compactus** Dall. Holotype.  
Pliocene. Ventura County, California.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 707,  
pl. 34, fig. 5.
23028. **Pecten complexicosta** Gabb. Plesiotypes.  
23102. Knoxville-Lower Cret. Wilbur Springs, Colusa County,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 Feb., 1896, p. 37,  
pl. 2, figs. 7-9.
3652. **Pecten comptus** Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 704, Atlas, pl. 6,  
fig. 5.
114775. **Pecten Nodipecten condylomatus** Dall. Cotype.  
Oligocene. Near Baileys Ferry, Calhoun County, Florida.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 733,  
pl. 34, figs. 14, 15.
107791. **Pecten Patinopecten coosensis** Shumard. Plesiotype.  
Miocene. Coos Bay, Oregon.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 731,  
pl. 29, fig. 2.
115527. **Pecten Plagiectenium demiurgus** Dall. Holotype.  
Miocene. Savanetta, Trinidad, West Indies.  
Dall. Trans. Wagner Free Inst. Sci. Phila., III, Pl. IV, 1898, p. 731,  
pl. 29, fig. 3.



8398. **Pecten deserti** Conrad. Holotype.  
Tertiary. Carrijo Creek, Colorado Desert, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. River to Pacific Ocean, V, 1856, p. 325, pl. 5, fig. 41.—Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 703.  
= *Pecten* (*Plagiectenium*) *deserti*.
13335. **Pecten discus** Conrad. Holotype.  
Miocene. Between La Purissima and Santa Inez, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. River to Pacific Ocean, VII, 1857, p. 190, pl. 3, fig. 1.  
= *Pecten* (*Chlamys?*) *discus*.
30215. **Pecten duplicicosta** Roemer? Plesiotype.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 16, pl. 5, fig. 5.
145432. **Pecten eboreus darlingtonensis** Dall. Cotypes.  
Miocene. Darlington, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 750.
107755. **Pecten eboreus senescens** Dall. Holotype.  
Pliocene. Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 751, pl. 29, fig. 5.
2495. **Pecten edgecombensis** Conrad. Holotype.  
Miocene. Edgewood County, North Carolina.  
Conrad, Proc. Acad. Nat. Sci. Phila., 1862, pp. 291, 581.—Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 722.  
= *Pecten jeffersonius edgecombensis*.
115533. **Pecten** (**Pecten**) **eugrammatus** Dall. Holotype.  
Oligocene. Haiti, West Indies.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 712, pl. 34, fig. 22.
7941. **Pecten** (**Patinopecten**) **expansus** Dall. Cotypes.  
148112. Pliocene. Near San Diego, California.  
Dall, Proc. U. S. Nat. Mus., I, 1878, p. 14; Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 706, pl. 26, fig. 1.
221. **Pecten extenuatus** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 184.  
= *Camptonectes extenuatus*.
137832. **Pecten** (**Pseudamusium**) **frontalis** Dall. Cotypes.  
Eocene. Garlands Creek, Clark County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.



107790. **Pecten (Chlamys) fucanas** Dall. Holotype.  
Miocene. Fuca Strait, Clallam Bay, Washington.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 704, pl. 26, fig. 7.
154186. **Pecten gibbus amplicostatus** Dall. Cotypes.  
Pliocene. Monroe County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 747.
135779. **Pecten (Pseudamusium) guppyi** Dall. Cotypes.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 718, pl. 34, figs. 12, 13; and p. 755.
154485. **Pecten (Chlamys) harrisii** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 742, pl. 34, fig. 24.
13317. **Pecten heermanni** Conrad. Holotype.  
Miocene. California.  
Conrad, Proc. Acad. Nat. Sci. Phila., VII, 1855, p. 267.—Dall,  
Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 701.  
= *Pecten (Lyropecten) hermanni*.  
See *Pallium estrellanum*.
7943. **Pecten (Pecten) hemphillii** Dall. Cotypes.  
Pliocene. San Diego, California.  
Dall, Proc. U. S. Nat. Mus., I, 1878, p. 15; Trans. Wagner Free  
Inst. Sci. Phila., III, Pt. IV, 1898, p. 706.
3657. **Pecten illawarrensii** Morris. Plesiotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 705, Atlas, pl. 9,  
fig. 9, 9a.
107754. **Pecten (Chlamys) indecisus** Dall. Holotype.  
Oligocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 744, pl. 34, fig. 3.
162522. **Pecten (Chlamys) jordani** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 111, pl. 12, figs. 6, 7.
162523. **Pecten (Chlamys) latiauritis fragilis** Arnold. Holotype.  
Pleistocene. San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 112, pl. 12, fig. 8.



3644. **Pecten leniusculus** Dana. Cotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 704, Atlas, pl. 9,  
figs. 6a, 6b.
111606. **Pecten madisonius** Say. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 30, pl. 4,  
figs. 1-5.
135838. **Pecten madisonius sayanus** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 725, pl. 26, fig. 6.
13311. **Pecten magnolia** Conrad. Cotype.  
Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 191.—Dall, Trans. Wagner Free Inst. Sci. Phila.,  
III, Pt. IV, 1898, p. 702.  
= *Pecten* (*Lyropecten*) *magnolia*.
13333. **Pecten meekii** Conrad. Cotypes.  
Miocene. San Raphael Hills, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 190, pl. 1, fig. 1.—Dall, Trans. Wagner Free Inst.  
Sci. Phila., III, Pt. IV, 1898, p. 699.  
= *Pecten* (*Patinopecten*) *meeki*.
4758. **Pecten mitis** Dana. Holotype.  
Carboniferous. Glendon on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 705, Atlas, pl. 9,  
figs. 8a, 8b.
358. **Pecten nebrascensis** Meek and Hayden. Cotypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 87.  
= *Chlamys nebrascensis*.
162524. **Pecten** (*Plagioctenium*) **newsomi** Arnold. Holotype.  
Pleistocene. Los Cerritos, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 113, pl. 11, figs. 1, 1a.
137887. **Pecten** (*Amusium*) **ocalanus** Dall. Holotype.  
Oligocene. Levy County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV,  
p. 756, pl. 29, fig. 2.



7938. **Pecten (Chlamys) opuntia** Dall. Cotypes.  
 107752. Pliocene. San Diego County, California.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
 p. 707, pl. 29, fig. 6.
135786. **Pecten (Chlamys) ornatus vaginulus** Dall. Cotypes.  
 Oligocene. Bowden, Jamaica.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 715.
154479. **Pecten (Chlamys) parmeleei** Dall. Cotypes.  
 Pliocene. San Diego, California.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 708, pl. 37, figs. 14, 14a.
114773. **Pecten (Amusium) precursor** Dall. Cotypes.  
 Oligocene. Near Baileys Ferry, Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 755.
3504. **Pecten propatulus** Conrad. Holotype.  
 Miocene. Astoria, Oregon.  
 Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas, pl.  
 18, figs. 13, a.—Dall, Trans. Wagner Free Inst. Sci. Phila.,  
 III, Pt. IV, 1898, p. 699.  
 = *Pecten (Patinopecten) propatulus*.
30214. **Pecten quinque costatus** (Sowerby) ? Plesiotypes.  
 Buda (Lower Cret.). Near Austin, Texas.  
 Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, pl. 5, figs. 2-4.
107750. **Pecten (Pecten) raveneli** Dall. Holotype.  
 Pliocene. Caloosahatchie River, near Fort Thompson,  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 721, pl. 29, fig. 10.
30213. **Pecten roemeri** (Hill). Plesiotypes.  
 Buda (Lower Cret.). Near Austin, Texas.  
 Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 15, pl. 4, fig. 2.
113670. **Pecten (Æquipecten) scissuratus** Dall. Holotype.  
 Oligocene. Ponton, Santo Domingo, West Indies.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 715, pl. 34, fig. 4.
7942. **Pecten (Pecten) stearnsii** Dall. Holotype.  
 Pliocene. San Diego, California.  
 Dall, Proc. U. S. Nat. Mus., I, 1878, p. 14; Trans. Wagner Free  
 Inst. Sci. Phila., III, Pt. IV, 1898, p. 706, pl. 26, fig. 5.
61246. **Pecten (Plagiecten) subventricosus** Dall. Cotypes.  
 Pliocene. Ventura County, California.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
 707, pl. 29, fig. 8.



115777. **Pecten** (**Æquipecten**) **suwaneënsis** Dall. Cotypes.  
Oligocene. Suwanee County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 734.
3658. **Pecten tenuicollis** Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 705, Atlas, pl. 9,  
figs. 7, 7a.
145991. **Pecten tenuis** Lea. Cotypes.  
Miocene. Jones's wharf, Patuxent River, Maryland.  
Lea, Trans. Am. Phil. Soc. (2), IX, 1845, p. 246, pl. 35, fig. 33.—  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 728.  
= **Pecten** (**Placopecten**?) **marylandicus**.
30216. **Pecten texanus** Roemer. Plesiotypes.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 17, pl. 5,  
figs. 6-8.
651. **Pecten utahensis** Meek. Cotype.  
Upper Carboniferous. Summit Spring Pass, east of  
Eureka, Nevada.  
Meek, Proc. Acad. Nat. Sci. Phila. for 1860, p. 310.  
= **Aviculopecten utahensis**.
137612. **Pecten** (**Chlamys**) **wahtubbeanus** Dall. Holotype.  
Eocene. Indian Mound Railroad Cut, Newton County,  
Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 736,  
pl. 34, fig. 9.
140126. **Pecten** (**wahtubbeanus** var.?) **willcoxii** Dall. Holotype.  
Eocene. McLeod's mill, Clark County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 737,  
pl. 29, fig. 4.
350. **Pectunculina parvula** Meek and Hayden. Holotype and  
paratypes.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 85.  
= **Limopsis parvula**.
23046. **Pectunculus** ? **ovatus** Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson, 7  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 189  
pl. 6, figs. 9, 10.



3605. **Pectunculus patulus** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas, pl. 18, figs. 8, a.
309. **Pectunculus subimbricatus** Meek and Hayden. Cotypes.  
Fox Hills (Cret.). Heart River, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 146.  
=See *Axinæa subimbricata*.
28412. **Pectunculus veatchi** (Gabb). Plesiotype.  
Chico (Cret.). Pentz, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897, p. 1039, pl. 64, fig. 1.
157830. **Pectunculus veatchi major** Stanton. Cotypes.  
Lower Tejon (Eocene). One mile southeast of Lower Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897, p. 1040, pl. 64, figs. 2, 3.
1868. **Penitella spelæa** Conrad. Cotypes.  
Post-Pliocene. San Pedro, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, V, 1856, p. 326, pl. 5, figs. 43, 43a, 43b.  
Pentacrinites. See *Pentacrinus*.
220. **Pentacrinus asteriscus** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV, 1864, p. 67, text figures.
682. **Pentacrinus asteriscus** Meek and Hayden. Plesiotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 26, pl. 3, figs. 2a-d.
8588. **Pentacrinus asteriscus** Meek and Hayden. Plesiotypes.  
Jurassic. Salt Creek, near Nephi, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 162, pl. 13, figs. 6a, b.
8588. **Pentacrinus whitei** Clark. Cotypes.  
Jurassic. Salt Creek and Diamond Valley, Utah.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 27, pl. 3, figs. 4a-c.
3647. **Pentadia corona** Dana. Cotypes.  
Carboniferous. Harpers Hill on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 713, Atlas, pl. 10, figs. 10-10c, 11, 12.
17927. **Pentamerella dubia** Hall. Plesiotype.  
Middle Devonian. Iowa City, Iowa.  
Owen, Rept. Geol. Surv. Wisconsin, Iowa, and Minnesota, 1852, pl. 3 A, fig. 1 (as *Atrypa* n. s.?).



17929. **Pentamerus** (n. sp.?) Owen. Plesiotype.  
Middle Devonian. Near Davenport, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3 A,  
fig 11.  
= *Gypidula comis*.
1167. **Pentamerus borealis** Meek. Holotype.  
Base of Upper Devonian. Anderson River, Mackenzie  
River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 95, pl. 13, figs. 11a-h.  
= *Pentamerella borealis*.
13868. **Pentamerus comis** Owen. Plesiotype.  
13869. Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 159, pl. 3, figs.  
4 and 7; pl. 14, figs. 15-15b; pl. 15, figs. 5-5b.  
= *Gypidula comis*.
13867. **Pentamerus lotis** Walcott. Cotype.  
Upper Devonian. Applegate Canyon, White Pine Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 161, pl. 3, figs.  
9-9c.  
= *Gypidula lotis*.
24529. **Pentremites bradleyi** Meek. Cotypes.  
Lower Carboniferous. Divide between Ross Fork and  
Lincoln Valley, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 470, and  
footnote.—Hambach, Trans. St. Louis Acad. Sci., XIII, 1903,  
p. 56, pl. 5, fig. 7.
33071. **Pentremites reinwardtii** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
33072. **Pentremites tennesseæ** Troost. Chirotypes.  
Lower Carboniferous. Craborchard Mountains, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 60.
115418. **Periaster elongata** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 27,  
pl. 5, fig 6.
36376. **Periploma angulifera** Philippi. Plesiotype.  
Pliocene. Shell Creek, near Charlotte Harbor, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1529, pl. 57, fig. 15.
115369. **Peripneustes antillarum** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874,  
pl. 7, figs. 1-3.



115410. **Peripneustes clevei** Cotteau. Holotype.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Handl., XIII, 6, 1874, p. 49,  
pl. 7, figs. 4-7.
30203. **Perisphinctes filiplex** (Quenstedt) ? Plesiotypes.  
Jurassic. Moffats bridge, Tuolumne River, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 423.
30202. **Perisphinctes mühlbacheri** Hyatt. Holotype.  
Jurassic. Near Greenwood, El Dorado County, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 426.
30204. **Perisphinctes virgulatiformis** Hyatt. Cotypes.  
Jurassic. Stanislaus River, opposite Bostwicks bar, California.  
Hyatt, Bull. Geol. Soc. Amer., V, 1894, p. 422.
157841. **Perissolax blakei** (Conrad). Plesiotype.  
Lower Tejon (Eocene). Army Point, near Benicia, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1045, pl. 67, fig. 1.
21254. **Perissolax brevirostris** Gabb. Plesiotype.  
Chico (Cret.). Near Pentz, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1047, pl. 67, fig. 4.
20103. **Perna excavata** White. Cotypes.  
Nanaimo (Cret.). Lucia, Sheep Jack, and Waldron islands,  
Gulf of Georgia.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 37, pl. 7, fig. 1.
13329. **Perna montana** Conrad. Holotype.  
Miocene. San Buenaventura, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 195.
43695. **Peronopora uniformis** Ulrich. Figured sections of holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 244, pl. 10,  
figs. 8, 8a.  
= *Peronopora compressa*.
43943. **Peronopora vera** Ulrich. Cotypes.  
Utica (Ord.). Cincinnati, Ohio.  
Ulrich, Amer. Geol., X, 1888, p. 40.
111908. **Perplicaria perplexa** Dall. Holotype and plesiotype.  
113217. Pliocene. Caloosahatchie River, near Fort Thompson, and  
Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 9,  
pl. 3, fig. 1; Pt. II, 1892, p. 228, pl. 13, fig. 4.



43430. **Petalotrypa compressa** Ulrich. Cotypes and figured sections.  
Middle Devonian. Rock Island, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 454, pl. 46, figs. 4-4f.
43431. **Petalotrypa delicata** Ulrich. Holotype and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 454, pl. 46, figs. 5, 5a.
43699. **Petigopora asperula** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 157, pl. 7, figs. 4-4a-c.
43700. **Petigopora gregaria** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 155, pl. 7, figs. 3, 3a-c.
43194. **Petigopora offula** Ulrich and Bassler. Cotypes.  
Cincinnati (Ord.). Middletown, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 32.
38205. **Petrablattina hastata** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 141, pl. 11, fig. 10.
145740. **Petricola (Petricolaria) calvertensis** Dall. Holotype.  
Miocene. Calvert Cliffs, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1060, pl. 44, fig. 14.
145020. **Petricola (Rupellaria) harrisii** Dall. Holotype.  
Miocene. Four and one-half miles above Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1060, pl. 43, fig. 1.
43271. **Phacelopora constricta** Ulrich. Holotype.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 406, pl. 29, fig. 2.
43272. **Phacelopora pertenuis** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Thebes, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 406, pl. 29, figs. 1b, 1c.
135719. **Phacoides (Bellucina) actinus** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, p. 1385, pl. 52, fig. 3.



157806. **Phacoides (Pleurolucina) amabilis** (Dall). Cotypes.  
Pliocene. Caloosahatchie, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1368.  
See *Lucina* (Here) *amabilis*.
114684. **Phacoides (Lucinisca) calhounensis** Dall. Holotype.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1371, pl. 52, fig. 16.
157776. **Phacoides (Miltha) caloosaënsis** (Dall). Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1376.  
See *Lucina* (Miltha) *caloosaënsis*.
114712. **Phacoides (Miltha) chipolanus** Dall. Holotype.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1375, pl. 51, fig. 11.
90906. **Phacoides (Miltha) claibornensis** (Conrad). Plesiotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1374, pl. 50, fig. 18.
146288. **Phacoides (Parvilucina) crenulatus** (Conrad). Plesiotype.  
Upper Miocene. Suffolk, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1383, pl. 52, fig. 12.
157640. **Phacoides domingensis** Dall. Holotype.  
Oligocene. Ballast Point, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1363, pl. 50, fig. 11.
114613. **Phacoides (Here) glenni** Dall. Holotype.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1566, pl. 50, fig. 17.
129633. **Phacoides (Here) hamatus** Dall. Holotype.  
Claibornian (Eocene). Claiborne Bluff, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1364, pl. 50, fig. 9.
114575. **Phacoides (Miltha) heracleus** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1376, pl. 51, fig. 10.



135041. **Phacoides (Parvilucina) intensus** Dall. Holotype.  
Pliocene. One hundred and sixty feet below surface in  
City Park well, San Diego, California.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1385, pl. 50, fig. 8.
157822. **Phacoides nassula caloosana** Dall. Cotypes.  
Caloosahatchie (Pliocene). Caloosahatchie River, south-  
ern Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1372.
112513. **Phacoides (Miltha) ocalanus** Dall. Holotype.  
Ocala (Oligocene). Ocala, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1375, pl. 50, fig. 14.
135863. **Phacoides (Parvilucina) piluliformis** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1382, pl. 52, fig. 6.
107392. **Phacoides (Lucinisca) plesiophus** (Dall). Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1371.  
See *Lucina plesiophus*.
135710. **Phacoides (Here) podagrinus** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1365, pl. 50, figs. 12, 13.
157782. **Phacoides (Parvilucina) prunus** Dall. Holotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1384, pl. 52, fig. 8.
135722. **Phacoides (Pleurolucina) quadricostatus** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1368, pl. 50, fig. 7.
135721. **Phacoides (Cavilucina) recurrens** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1369, pl. 52, fig. 11.
114686. **Phacoides (Parvilucina) sphæriolus** Dall. Holotype.  
Chipola (Oligocene). McDonald's ranch, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1382, pl. 52, fig. 15.



135723. **Phacoides (Here) tithonis** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1366, pl. 50, fig. 10.
115125. **Phacoides (Bellucina) tuomeyi** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1385, pl. 52, fig. 1.
157789. **Phacoides (Bellucina) waccamawensis** Dall. Holotype.  
Pliocene. Tillys Lake, Waccamaw, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1386, pl. 52, fig. 2.
157756. **Phacoides (Here) wacissanus** Dall. Holotype.  
Oligocene. Ballast Point, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1365, pl. 50, fig. 15.
23880. **Phacops braziliensis** Clarke. Cotypes.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 15, pl. 1,  
figs. 1, 2.
24432. **Phacops crassimarginatus** Hall. Plesiotype.  
Middle Devonian. Three miles below Rockingham, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa and Minn., 1852, pl. 3A, fig. 6.  
= *Proetus crassimarginatus*.
34124. **Phacops hudsonicus** Hall. Plesiotype.  
Helderbergian (Dev.). Atoka quadrangle, Indian Terri-  
tory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 571,  
pl. 71, figs. 4a-4d.
23881. **Phacops menurus** Clarke. Plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 17, pl. 1,  
fig. 15.
23886. **Phacops scirpeus** Clarke. Plastotype.  
Middle Devonian. Rio Maecuru, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, IX, 1890, p. 18, pl. 1,  
fig. 6.
43599. **Phænopora incipiens** Ulrich. Cotypes and figured sections  
43600. Trenton (Ord.). Montreal, Canada, and Chimney Point  
Vermont.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. 1,  
1893, p. 174, pl. 13, figs. 14-17.



43442. **Phænopora lindströmi** Ulrich. Holotype and figured sections.  
Silurian. Island of Gotland, Sweden.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 392, fig. 12d.
43693. **Phænopora (?) multipora** Hall. Plesiotypes and figured sections.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Jour. Cincinnati Soc. Nat. Hist., V, 1882, p. 171, pl. 8, figs. 7, 7a, 7b.  
= *Eurydictya multipora*.
43601. **Phænopora wilmingttonensis** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 175, pl. 13, figs. 22-26.
112207. **Phalium aldrichi** Dall. Holotype.  
Oligocene. Ten-Mile Creek, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 163; ibid., Pt. II, 1892, p. 263, pl. 21, fig. 2 (as *Cassis* (*Phalium*) *aldrichi*).
112203. **Phalium globosum** Dall. Cotypes.  
Upper Eocene. East of Newton, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 161; ibid., Pt. II, 1892, p. 262, pl. 20, figs. 6, 11 (as *Cassis* (*Phalium*) *globosum*).
184. **Pharella? dakotensis** (Meek and Hayden). Holotype.  
Dakota (Cret.). Just below mouth of Vermilion River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 251, pl. 1, fig. 3.  
See *Solen? dakotensis*.
7821. **Pharella? pealei** Meek. Cotypes.  
Colorado (Cret.). Missouri River, below Gallatin City, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 496.—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 21, pl. 11, figs. 6a, 6b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 115, pl. 25, figs. 12, 13.
35373. **Phillipsia trinucleata** Herrick. Plesiotypes.  
Weber (Upper Carb.). Empire Hill, Leadville District, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 478, pl. 10, figs. 11, 12.
24335. **Pholadella parallela** (Hall). Plesiotype.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 68, pl. 1, fig. 20.  
See *Grammysia* (*Pholadella?*) *parallela*.



3643. **Pholadomya (Homomya) audax** Dana. Holotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 687, Atlas, pl. 3,  
figs. 1a-c.
12397. **Ph[o]ladomya (Goniomya) borealis** Meek. Holotype.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 42.  
= *Goniomya borealis*
22895. **Pholadomya coloradoensis** Stanton. Cotypes.  
Colorado (Cret.). Williams Creek, Huerfano Park,  
Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 116, pl. 26,  
fig. 2.
3673. **Pholadomya (Homomya) curvata** Morris? Plesiotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 688, Atlas, pl. 3,  
figs. 2a, 2b.
25643. **Pholadomya (Homomya) glendonensis** Dana. Holotype.  
Carboniferous. Glendon on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 687, Atlas, pl. 2,  
fig. 12.
217. **Pholadomya humilis** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 182;  
Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV,  
1864, p. 104, pl. 4, figs. 3a, 3b.
28956. **Pholadomya inæquiplicata** Stanton. Holotype and  
paratypes.  
Jurassic. Divide between Fawn Creek and Gallatin  
Valley, Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 625, pl.  
74, fig. 4.
7815. **Pholadomya kingii** Meek. Holotype and plesiotype.  
28957. Jurassic. Near Lower Canyon of Yellowstone River,  
Montana, and Yellowstone National Park.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 150, pl. 38, figs. 3a, 3b.—Stanton, Mon. XXXII, Pt. II,  
U. S. Geol. Surv., 1899, p. 624, pl. 74, figs. 1-3.
20251. **Pholadomya occidentalis** Morton. Plesiotype.  
Cretaceous. Hempstead County, Arkansas.  
Owen, Second Rept. Geol. Recon. of Arkansas, 1860, pl. 8, fig. a.



1910. **Pholadomya papyracea** Meek and Hayden. Holotype.  
Fort Benton (Cret.). Chippewa Point, near Fort Benton,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1862, p. 28.—Meek,  
Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 217, pl. 5,  
figs. 4a, b.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893,  
p. 116, pl. 26, fig. 1.
30236. **Pholadomya roemeri** Shattuck. Cotypes.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 28, pl. 15,  
figs. 3-6.
9859. **Pholadomya sancti-sabæ** (Roemer)? Plesiotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 164, pl. 21, fig. 4.
1299. **Pholadomya subelongata** Meek. Cotypes.  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 42; Bull. U. S. Geol. and  
Geogr. Surv. Terr., II, No. 4, 1876, p. 362, pl. 2, figs. 1, a.
181. **Pholadomya subventricosa** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1857, p. 142.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 217, pl. 39,  
figs. 8a, 8b.
9877. **Pholadomya texana** Conrad. Holotype.  
Cretaceous. Turkey Creek, Loen, and Eagle Pass Road,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 152, pl. 19, fig. 3.
187. **Pholadomya undata** Meek and Hayden. Holotype and  
paratype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 81.  
= *Liopistha* (*Cymella*) *undata*.
3639. **Pholadomya (Platymya) undata** Dana. Holotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 687, Atlas, pl. 2,  
figs. 11-11a, 11b.
259. **Pholas cuneata** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1858, p. 53.  
= *Martesia cuneata*.



13778. **Pholidops bellula** Walcott. Cotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 113, pl. 2, figs. 6, 6a, 6b.
13779. **Pholidops quadrangularis** Walcott. Holotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 114, pl. 2, fig. 7.  
[This is the plate of a crinoid.]
115638. **Phorus delectus** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXXII, 1876, p. 529, pl. 28, fig. 10.
12510. **Phorus exoneratus** White. Cotypes.  
Eocene. Bijou Basin, forty miles east of Denver, Colorado.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 134.  
[The locality given is erroneous and the true locality is unknown.  
See Eleventh Ann. Rept. U. S. Geol. Surv. Terr., pp. 191, 192.  
T. W. Stanton.]
135146. **Phos albirupina** Harris. Cotypes.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, Pt. II, 1894, p. 166, pl. 6, fig. 5.
114191. **Phos (Strongylocera) chipolanus** Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 311.
115488. **Phos elegans** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 290, pl. 16, fig. 13.
115487. **Phos erectus** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 410, pl. 16, fig. 1.
113778. **Phos (Strongylocera) fasciolatus** Dall. Holotype.  
Oligocene. Potrero, Rio Amina, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 311, pl. 28, fig. 12.
113780. **Phos gabbii** Dall. Holotype.  
Oligocene. Potrero, Rio Amina, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 310, pl. 29, fig. 4.
135145. **Phos hilli** Harris. Holotype.  
Eocene. Near Vines Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, Pt. II, 1894, p. 167, pl. 6, fig. 6.



147036. **Phos johnsoni** Vaughan. Holotype.  
Jacksonian (Eocene). Jackson, Louisiana.  
Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 36, pl. 3, fig. 3.
113665. **Phos metuloides** Dall. Holotype.  
Oligocene. Ponton, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 310, pl. 28, fig. 15.
115489. **Phos moorei** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 290, pl. 16, fig. 11.
38157. **Phthanocoris occidentalis** Scudder. Cotypes.  
Upper Coal Measures. Kansas City, Missouri.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 348, pl. 32, fig. 4; Foss. Insects N. America, I, 1890, p. 312, pl. 18, fig. 4.
25510. **Phyllobius antecessor** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 57, pl. 9, fig. 16.
25507. **Phyllobius avus** Scudder. Holotype.  
Older Tertiary. White River, Colorado and Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 58, pl. 9, fig. 17.  
= *Phyllobius carcerarius*.
25509. **Phyllobius carcerarius** Scudder. Cotypes.  
Older Tertiary. White River, Colorado and Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 57, pl. 9, fig. 11.  
See *Phyllobius avus*.
384. **Phylloceras ? halli** (Meek and Hayden). Holotype.  
Fort Pierre (Cret.). Missouri River, one hundred and fifty miles above mouth of Milk River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 458, pl. 24, figs. 3a-c.  
See *Ammonites ? halli*.
23083. **Phylloceras knoxvillensis** Stanton. Holotype and paratype.  
23084. Knoxville (Lower Cret.). One mile northwest of Cooper Ranch, Tehama County, and three miles northwest of Paskenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 72, pl. 14, figs. 1-4.
12451. **Phylloceras ? ramosus** Meek. Holotype.  
Nanaimo (Cret.). Komooks, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 3, pl. 5, figs. 1, a, b.  
See *Ammonites (Scaphites?) ramosus*.



43705. **Phyllodictya frondosa** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 174, pl. 8,  
figs. 11, 11a, 11b.
43598. **Phyllodictya frondosa** Ulrich? Plesiotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I.  
1893, p. 142.
43597. **Phyllodictya varia** Ulrich. Cotypes and figured sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I.  
1893, p. 144, pl. 14, figs. 1-8.
15314. **Phyllograptus ?? cambrensis** Walcott. Holotype.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 604, pl. 59,  
figs. 3, 3a.  
See *Diplograptus ? simplex*.  
*Phyllopora ? sp. indet.* Ulrich = *Reteporella cinctata*.
43433. **Phyllopora aspera** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 613, pl. 44, figs. 5-5b.
43435. **Phyllopora superba** Ulrich. Cotypes and figured sections.  
Hamilton (Dev.). Erie County, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 613, pl. 44, figs. 6-6c; pl. 55,  
figs. 9, 9a.  
= *Reteporella perundata*.
43704. **Phyllopora variolata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 160, pl. 6,  
fig. 14.  
= *Phylloporina variolata*.
43438. **Phylloporina aspera** (Hall). Plesiotype and figured  
sections.  
Chazy (Ord.). Mingan, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 639, pl. 53, figs. 4-4c.
43441. **Phylloporina asperato-striata** (Hall). Plesiotype and  
figured sections.  
Rochester (Sil.). Lockport, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 332, pl. 53, figs. 5-5d.
43437. **Phylloporina corticosa** Ulrich. Cotypes.  
Black River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 639, pl. 53, figs. 3, 3a;  
Geol. and Nat. Hist. Surv. of Minn., Final Rept., III, Pt. I.  
1893, p. 212, pl. 5, figs. 1-10.



43439. **Phylloporina dawsoni** Ulrich. Cotypes.  
Trenton (Ord.). Montreal, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 54, figs. 1-11.
43696. **Phylloporina halli** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 181, figs. 7-7f; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 211, pl. 4, figs. 16-21.
- 43731 **Phylloporina reticulata** (Hall). Plesiotypes and figured  
to sections.  
43733. Trenton (Ord.). Trenton Falls, New York.  
Black River (Ord.). Cannon Falls and Minneapolis,  
Minnesota.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 53, figs. 2, 2a; Geol. and  
Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 210,  
pl. 4, figs. 8-15.
43697. **Phylloporina sublaxa** Ulrich. Cotypes.  
43698. Stones River (Ord.). Lebanon, Tennessee, and Minne-  
apolis, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 179, figs.  
6-6f; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 209, pl. 4, figs. 1-7.
43440. **Phylloporina trentonensis** (Nicholson). Plesiotype and  
figured sections.  
Trenton (Ord.). Belleville, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 640, pl. 53, figs. 1-1c.
414. **Phylloteuthis subovata** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 176.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 505, pl. 33,  
fig. 3.  
Physa sp. White = P. usitata.
8596. **Physa bridgerensis** Meek? Plesiotypes.  
Eocene. San Pete Valley, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 210, pl. 21, fig. 2a.
9001. **Physa bridgerensis** Meek. Plesiotype.  
Bridger (Eocene). Near Fort Bridger, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 45, pl. 19, figs. 10a, 10b; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 450, pl. 30, figs. 9, 10.
20069. **Physa bullata** White. Cotype.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 25, pl. 3, 1  
14-16, ?17.



7875. **Physa carletoni** Meek. Holotype.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 508.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
p. 306, pl. 7, fig. 12; Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 449, pl. 5, fig. 18.
12470. **Physa copei** White. Cotypes.  
Laramie (Cret.). Cow Island, Missouri River, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 85, pl. 24, figs. 4a, 4b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 450, pl. 25, figs. 1, 2.
9054. **Physa felix** White. Cotypes.  
Laramie (Cret.). Crow Creek, northern Colorado.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 84, pl. 22, fig. 1a; Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 450, pl. 25, fig. 3.
8890. **Physa kanabensis** White. Cotypes.  
Laramie (Cret.). Upper Kanab, Utah.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 119.
20068. **Physa kanabensis** White? Plesiotypes.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 24, pl. 3, figs. 11-13.
2120. **Physa longiuscula** Meek and Hayden. Holotype and  
2121. paratypes.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 119.  
= *Bulinus longiusculus*.
112561. **Physa meigsii** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson.  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III. Pt. I, 1890, p. 22  
pl. 10, fig. 12.
8867. **Physa pleromatis** White. Cotypes.  
8876. Eocene. Last Bluff, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 211, pl. 21, figs. 1a, b; Third Ann. Rept. U. S. Geol. Surv.  
1883, p. 450, pl. 30, figs. 6-8.
20067. **Physa pleromatis** White. Plesiotype.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 24, pl. 3, figs. 2-5.
33304. **Physa prisca** Walcott. Holotype.  
Lower Carboniferous. New York and Richmond Moun-  
tains, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 262, fig. 6.



19181. **Physa rhomboidea** Meek and Hayden. Holotype.  
Laramie (Cret.). Three miles below Fort Union, North  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 119.  
= *Bulinus rhomboideus*.
2140. **Physa secalina** Evans and Shumard. Holotype.  
White River (Miocene). Pinots Creek, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 604, pl. 45,  
figs. 4a, 4b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 450, pl. 32, figs. 35, 36.
2118. **Physa subelongata** Meek and Hayden. Holotype.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci., Phila., VIII, 1856, p. 120.  
= *Bulinus subelongatus*.
12484. **Physa usitata** White. Cotypes.  
22328. Bear River (Cret.). Sulphur Creek and twenty miles  
north of Cokeville, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 85, pl. 30, fig. 11 (as *Physa* sp.); Third Ann. Rept. U. S.  
Geol. Surv., 1883, p. 449, pl. 6, fig. 17 (as *Physa* sp.); Bull.  
No. 128, U. S. Geol. Surv., 1895, p. 47, pl. 6, figs. 8, 9.
25505. **Phyxelis dilapsus** Scudder. Holotype.  
Older Tertiary. Green River, Wyoming.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 41, pl. 8, fig. 11.
25501. **Phyxelis eradicatus** Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 43, pl. 8, figs. 17, 18.
25503. **Phyxelis evigoratus** Scudder. Cotype.  
25504. Older Tertiary. White River, Utah, and Roan Mountains,  
western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 42, pl. 8, figs. 13,  
14, 15.
25506. **Phyxelis excissus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 42, pl. 8, fig. 16.
3659. **Pileopsis tenella** Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 706, Atlas, pl. 9  
figs. 13a-13b.
153824. **Pinna caloosaënsis** Dall. Holotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 6  
pl. 26, fig. 4.



14367. *Pinna consimilis* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 236, pl. 20, fig. 13.
14368. *Pinna inexpectans* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 235, pl. 19, fig. 11.
20221. *Pinna kingii* Meek. Holotype.  
Jurassic. Weber Canyon, Wahsatch Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 131,  
pl. 12, figs. 9, 9a.
8486. *Pinna peracuta* Shumard? Plesiotype.  
Upper Carboniferous. Mesa edge, near Relief Spring,  
Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 151, pl. 11, fig. 5a.
12198. *Pinna peracuta* Shumard. Plesiotype.  
Upper Carboniferous. Twelve miles west of Plattsmouth,  
Nebraska.  
White, Thirteenth Ann. Rept. Geol. Surv. Indiana, 1884, p. 145,  
pl. 28, figs. 1, 2.
8640. *Pinna petrina* White. Cotypes.  
Colorado (Cret.). One mile south of Pajuate, New Mexico.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 24; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 182, pl. 13, figs. 7a, b.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 88, pl. 20, fig. 1.
8101. *Pinna petrina* White. Cotypes.  
Colorado (Cret.). Near Fort Wingate, New Mexico.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 88, pl. 19, fig. 4.  
See *Pinna stvensoni*.
112508. *Pinna quadrata* Dall. Holotype.  
Oligocene. Ocala, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 660,  
pl. 29, fig. 7.
8101. *Pinna stvensoni* White. Holotype.  
Colorado (Cret.). Near Fort Wingate, New Mexico.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 47.  
= *Pinna petrina*.
43428. *Pinnatopora conferta* Ulrich. Cotype.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 618, pl. 56, fig. 5; pl. 66,  
fig. 6.



43488. **Pinnatopora curvata** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 76, pl. 14, fig. 4.
43423. **Pinnatopora elegans** Young and Young. Figured sections  
of plesiotype.  
Carboniferous. Scotland.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 56, fig. 2.
43427. **Pinnatopora flexuosa** Ulrich. Plesiotype.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 616, pl. 66, figs. 4-4c.
43486. **Pinnatopora intermedia** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 74, pl. 14, fig. 1.
43421. **Pinnatopora laxa** Young and Young. Figured sections of  
plesiotype.  
Carboniferous. Scotland.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 56, figs. 4, 4a.
43487. **Pinnatopora minor** Ulrich. Cotypes.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 77, pl. 14, figs. 7, 7a.
43422. **Pinnatopora retroflexa** Young and Young. Figured sections  
of plesiotype.  
Carboniferous. Scotland.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 56, fig. 3.
43489. **Pinnatopora simulatrix** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 75, pl. 14, fig. 3.
43424. **Pinnatopora trilineata** Meek. Figured section of plesiotype.  
Upper Coal Measures. Springfield, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 620, pl. 66, fig. 6.
43490. **Pinnatopora vinei** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 77, pl. 14, fig. 5.
43426. **Pinnatopora vinei** Ulrich. Plesiotype.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 616, pl. 66, figs. 5-5b.
43492. **Pinnatopora whitii** Foerste. Plastot.  
Lower Coal Measures. Flint Ridge, Ohio.  
Foerste, Bull. Sci. Lab. Denison Univ., II, 1887, p. 87, pl. 7,  
4a-c.



43491. **Pinnatopora youngi** Ulrich. Cotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 78, pl. 14, figs. 6, 6a.
43425. **Pinnatopora youngi** Ulrich. Plesiotype.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 615, pl. 66, fig. 3.
113224. **Pisania (Celatoconus) nux** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 235, pl. 13, fig. 6.
8208. **Pisidium saginatum** White. Cotypes.  
Laramie (Cret.). Near Evanston, Wyoming.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 128; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 440, pl. 20, figs. 14, 15.
136750. **Pitaria (Lamelliconcha) calcanea** Dall. Holotype.  
Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1270, pl. 55, fig. 19.
115163. **Pitaria (Lamelliconcha) filosina** Dall. Holotype.  
Upper Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1270, pl. 57, fig. 1.
114753. **Pitaria (Hyphantosoma) floridana** Dall. Holotype.  
Chipola (Oligocene). Alum Bluff, Apalachicola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1267, pl. 54, fig. 10.
135252. **Pitaria (Lamelliconcha) hillii** Dall. Holotype.  
Oligocene. Near Gatun, Panama Canal, Panama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1268, pl. 54, fig. 7.
109232. **Pitaria (Hyphantosoma) opisthogrammata** Dall. Holotype.  
Pliocene. Near Charlotte Harbor, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p. 1267, pl. 54, fig. 8.
29414. **Placenticerias guadalupe** (Roemer). Plesiotypes.  
San Carlos (Upper Cret.). San Carlos, Presidio Co., Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 199.
9735. **Placenticerias intercalare** Meek. Plesiotypes.  
18978. Montana (Upper Cret.). Harper, Laramie Plains, Wyo-  
29411. ming; Ponil Canyon, New Mexico; Upper Missouri.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 207-211, pl. 36, fig. 5; pl. 37, figs. 1-4; pl. 38, fig. 1.



411. **Placenticeras (Sphenodiscus) lenticulare** (Owen). Plesiotypes.  
 Fox Hills (Cret.). Moreau River, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 473, pl. 34, fig. 1a, and text fig. 66.
388. **Placenticeras placenta** (DeKay). Plesiotypes.  
 3680. Fort Pierre (Cret.). Cheyenne River, South Dakota, and North Red River, Minnesota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, pp. 465-468, fig. 65 in text, and pl. 24, figs. 2a, 2b.
22939. **Placenticeras placenta** (DeKay)? Plesiotypes.  
 Colorado (Cret.) Upper Kanab Valley, Utah.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 169, pl. 39, figs. 1-3.  
 Fig. 1 = *Placenticeras pseudoplacenta*.  
 Figs. 2, 3 = *Placenticeras stantoni*.
369. **Placenticeras placenta intercalare** Meek and Hayden. Holotype.  
 Fort Pierre (Cret.). Cheyenne River at mouth of Sage Creek, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 468, pl. 23, figs. 1a-c.  
 See *Ammonites placenta intercalaris*.
21651. **Placenticeras planum** Hyatt. Cotypes.  
 29410. San Carlos (Upper Cret.). San Carlos, Presidio County, Texas; Presidio del Norte, Mexico.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 202, pl. 33, figs. 2-4; pl. 34, figs. 1-3.
22344. **Placenticeras pseudoplacenta** Hyatt. Cotype.  
 Colorado (Upper Cret.). Upper Kanab Valley, Utah.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 216, 217, pl. 43, figs. 3-10.  
 See *Placenticeras placenta*?
22199. **Placenticeras pseudoplacenta** Hyatt. Cotype.  
 Fort Benton (Upper Cret.). Muddy Creek, Huerfano County, Colorado.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 216, 217, pl. 43, fig. 11.
29411. **Placenticeras sancarlosense** Hyatt. Cotypes.  
 San Carlos (Upper Cret.). San Carlos, Presidio County, Texas.  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 200, pl. 30, figs. 1-3, pl. 31, figs. 1, 2.
22939. **Placenticeras stantoni** Hyatt. **Holo**  
 Colorado (Upper Cret.). Upper Kanab Valley, **Utah**  
 Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 214.  
 See *Placenticeras placenta*?



1394. **Placenticeras? vancouverensis** (Meek). Holotype.  
Nanaimo (Cret.). Komooks, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 370,  
pl. 6, figs. 1a-c.  
See *Ammonites vancouverensis*.
18936. **Placenticeras whitfieldi** Hyatt. Cotype.  
Montana (Upper Cret.). Upper Missouri.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 221-232, pl. 47,  
figs. 1, 2.
41364. **Placentula marginata** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 124, pl.  
10, figs. 13a-c.
115422. **Placocythus barretti** Duncan. Cotypes.  
Miocene. Jamaica, West Indies.  
Duncan, Quart. Journ. Geol. Soc. London, XIX, 1863, p. 437, pl.  
16, fig. 1.
115425. **Placocythus morei** Duncan. Plesiotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXI, 1865, 1866, p. 10,  
pl. 2, fig. 1.
115423. **Placotrochus alveolus** Duncan. Holotype.  
Miocene. Jamaica, West Indies.  
Duncan, Quart. Journ. Geol. Soc. London, XIX, 1863, p. 438, pl.  
16, fig. 2.
135778. **Placunanomia lithobleta** Dall. Cotypes.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 778.
8082. **Placunopsis hilliardensis** White. Cotypes.  
Colorado? (Cret.). Hilliard Station, Wyoming.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terrs., 1879,  
p. 278, pl. 7, fig. 14a.—Stanton Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 68, pl. 8, fig. 11.
115370. **Plagionotus loveni** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 41,  
pl. 8, figs. 7, 8.
115492. **Planaxis crassilabrum** Guppy. Holotype.  
Pliocene. Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 411, pl. 18, fig. 13.
18360. **Planolites annularis** Walcott. Holotype.  
Lower Cambrian. Near North Greenwich, Washington  
County, New York.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 34; Tenth Ann.  
Rept. U. S. Geol. Surv., 1890, p. 602, pl. 60, fig. 5.



33796. **Planolites corrugatus** Walcott. Holotype.  
 Greyson (Algonkian). Near Neihart, Montana.  
 Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 236, pl. 24, fig. 8.
33797. **Planolites superbus** Walcott. Cotypes.  
 Greyson (Algonkian). Near Neihart, Montana.  
 Walcott, Bull. Geol. Soc. Amer., X, 1899, p. 237, pl. 24, fig. 9.
8909. **Planorbis æqualis** White. Cotypes.  
 Eocene. Henrys Fork, Green River, Wyoming.  
 White, Proc. U. S. Nat. Mus., III, 1880, p. 159; Third Ann. Rept.  
 U. S. Geol. Surv., 1883, p. 448, pl. 29, fig. 10.
13392. **Planorbis ammon** Gould. Holotype.  
 Post-Tertiary. Colorado Desert, California.  
 Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
 V, 1856, p. 331, pl. 11, figs. 14-16.
2105. **Planorbis amplexus** Meek and Hayden. Holotype.  
 Laramie (Cret.). Near mouth of Judith River, Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1857, p. 135.
2105. **Planorbis (Bathyomphalus) amplexus** (Meek and Hay-  
 den.) Paratypes.  
 Laramie (Cret.) Near mouth of Judith River, Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 539.
9005. **Planorbis cirratus** White. Cotypes.  
 Green River (Eocene). Three miles east of Table Rock  
 Station, Wyoming.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
 p. 44, pl. 19, figs. 5a-c; Third Ann. Rept. U. S. Geol. Surv.,  
 1883, p. 448, pl. 29, fig. 7.
112546. **Planorbis conanti** Dall. Holotype.  
 Pliocene. Caloosahatchie River, near Fort Thompson,  
 Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890,  
 p. 20, pl. 10, fig. 1, 1a.
1985. **Planorbis convolutus** Meek and Hayden. Holotype and  
 2167. paratypes.  
 Laramie (Cret.). Little Horn and Powder rivers, Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p.  
 120.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 536,  
 pl. 42, figs. 12a, 12b.
2176. **Planorbis convolutus** var. Meek and Hayden. Cotypes.  
 Laramie (Cret.). Little Horn and Powder rivers, Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 538, pl. 4  
 figs. 11a-e.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
 p. 447, pl. 27, fig. 16.



112548. **Planorbis disstoni** Dall. Holotype  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, p. 21, pl. 10, figs. 2, 2a.
2182. **Planorbis fragilis** Meek and Hayden. Holotype  
Fort Union (Cret.). Fort Berthold, North Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1857, p. 15  
= **Planorbis (Bathyomphalus) planoconvexus**.
12506. **Planorbis (Bathyomphalus) kanabensis** White. Cotype  
Laramie (Cret.). Upper Kanab, Utah.  
White, Powell's Rept. Geol. Uinta Mountains, 1876, p. 11  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 447, pl. 7  
figs. 21-23.
2170. **Planorbis nebrascensis** Evans and Shumard. Plesiotype  
White River (Miocene). Pinots Creek, South Dakota  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 600, pl. 5  
figs. 2a, 2b.—White, Third Ann. Rept. U. S. Geol. Surv.  
1883, p. 448, pl. 32, figs. 22, 23.
2182. **Planorbis (Bathyomphalus) planoconvexus** (Meek and  
Hayden). Holotype  
Laramie (Cret.). Fort Berthold, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 538, pl. 4  
figs. 9a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 447, pl. 27, figs. 17, 18.  
See **Planorbis fragilis**.
22336. **Planorbis præcursoris** White. Cotype  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 46, pl. 6, figs. 1-5.
694. **Planorbis spectabilis** Meek. Cotype  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 16  
pl. 17, figs. 13d-f.
695. **Planorbis spectabilis** Meek. Cotype  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 5  
pl. 5, figs. 7a-d.  
See **Planorbis utahensis spectabilis**.
697. **Planorbis spectabilis utahensis** (Meek). Cotype  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 5  
pl. 5, figs. 8a-c; Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I,  
1877, p. 190, pl. 17, figs. 14a-14c.  
See **Planorbis utahensis**.



697. **Planorbis utahensis** Meek. Cotypes.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila. for 1860, p. 314.—White,  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 447, pl. 29,  
figs. 1-3.  
= *Planorbis spectabilis utahensis*.
8599. **Planorbis utahensis** Meek. Plesiotypes.  
Eocene. East slope of Pine Mountains and Castle Valley,  
Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 209, pl. 21, fig. 8a.  
= *Planorbis spectabilis utahensis*.
695. **Planorbis utahensis spectabilis** (Meek). Cotypes.  
Eocene. Hams Fork, northeast of Fort Bridger, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 447, pl. 29,  
figs. 4-6.  
= *Planorbis spectabilis*.
317. **Planorbis veternus** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 418  
(nomen nudum); Pal. Upper Mo., Smithsonian Cont. to  
Knowl. No. 172, XIV, 1864, p. 107, pl. 4, figs. 1a, 1b.—White,  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 446, pl. 3, fig. 6.
20057. **Planorbis veternus** Meek and Hayden? Plesiotype.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 21, pl. 4, figs. 20, 21.
2171. **Planorbis vetulus** Meek and Hayden. Holotype.  
White River (Miocene). Pinots Creek, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 175.  
= *Planorbis vetustus*.
2171. **Planorbis vetustus** Meek and Hayden. Holotype.  
White River (Miocene). Pinots Creek, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 601, pl. 45, figs.  
1a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 448,  
pl. 32, figs. 16-18.  
See *Planorbis vetulus*.
11938. **Planorbis willcoxii** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 4,  
pl. 1, figs. 6c, 6d.
28140. **Plasmopora lambii** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 154.



13929. **Platyceras conradi** Walcott. Cotypes.  
Middle Devonian. Combs Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 182, pl. 16, figs. 1, 1a.
45954. **Platyceras ? depressum** Ulrich and Scofield. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1069, pl. 61, figs. 55, 56.
23846. **Platyceras hoyti** Walcott. Holotype.  
Upper Cambrian. Four miles west of Saratoga Springs, New York.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 268, pl. 20, fig. 8.
8504. **Platyceras nebrascense** Meek. Plesiotypes.  
8505. Upper Carboniferous. Near Santa Fé, New Mexico, and Nebraska City, Nebraska.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 159, pl. 12, figs. 5a-5d.
13926. **Platyceras nodosum** Conrad. Plesiotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 183, pl. 6, figs. 5-5b.
14405. **Platyceras occidens** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 254, pl. 24, figs. 9, 9a.
35362. **Platyceras parvum** Swallow. Plesiotypes.  
Hermosa (Upper Carb.). Sandstone Mountain, Rico quadrangle, and Bear Creek, Needle Mountain quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 461, pl. 10, figs. 1, 1a; 2, 2a.
14406. **Platyceras piso** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 254, pl. 24, figs. 7-7b.
15371. **Platyceras primævum** Billings. Plesiotype.  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 130, pl. 12, figs. 5, 5a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 618, pl. 74, figs. 11, 11a.
35217. **Platyceras primordialis** Hall? Plesiotype.  
Middle Cambrian. Soda Butte Creek, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 453, pl. 63, fig. 1.



23845. **Platyceras texanum** Walcott. Cotypes.  
Upper Cambrian. Packsaddle Mountain, Burnett County,  
Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 268, pl. 20, fig. 5.
13924. **Platyceras thetiforme** Walcott. Cotypes.  
Middle Devonian. Brush Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 184, pl. 6, figs. 4-4b.
46534. **Platyceras tribulosum** White. Holotype.  
Burlington (Miss.). Burlington, Iowa.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 168, pl. 41, figs. 6a, 6b.
13923. **Platyceras undulatum** Walcott. Holotype.  
Middle Devonian. Brush Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 184, pl. 6, figs. 2, 2a.
45955. **Platyceras ? wisconsinense** Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1068, pl. 61, figs. 49-52.
158316. **Platycœnia jacksonensis** Vaughan. Holotype.  
Jacksonian (Eocene). Jackson, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 150, pl. 17,  
figs. 9-9c.
- Platycrinites. See Platycrinus.
39888. **Platycrinus ann-dixonii** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
7806. **Platycrinus haydeni** Meek. Holotype.  
Lower Carboniferous. Old Baldy, near Virginia City,  
Montana.  
Meek, Sixth Ann. Rept., U. S. Geol. Surv. Terr., 1873, p. 469,  
and footnote, as *Platycrinites haydeni*.—White, Twelfth Ann.  
Rept. U. S. Geol. Surv., Terr., Pt. I, 1883, p. 122, pl. 33,  
fig. 7a.
24185. **Platycrinus hemisphericus** Meek and Worthen. Plesiotype.  
Keokuk (Miss.). Crawfordsville, Indiana.  
Grabau, Amer. Journ. Sci. (4), XVI, 1903, p. 296, fig. 8, p. 297.
39886. **Platycrinus huntsvillæ** Troost. Chirotypes.  
Mississippian. Near Huntsville, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
7805. **Platycrinus (Eucladocrinus) montanaensis** Meek. Holotype.  
Lower Carboniferous. Twin Springs, Dry Creek Valley,  
Montana.  
Meek, Fifth Ann. Rept. U. S. Geol. Surv. Terr., 1872, p. 373.  
= *Eucladocrinus montanaensis*.



39887. **Platycrinus polydactylus** Troost. Chirotypes.  
Mississippian. Near Huntsville, Alabama.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 62.
8526. **Platycrinus vexabilis** White. Holotype.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 15; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 81, pl. 5, fig. 2.
35396. **Platycystites faberi** Miller. Plastotype.  
Trenton (Ord.). Scott County, Virginia.  
Miller, N. Amer. Geol. and Pal., 1889, p. 272, fig. 398.
14407. **Platyostoma inornatum** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 255, pl. 24, figs  
3, 3a.
14984. **Platyostoma (?) minutissimum** Clarke. Cotypes.  
Naples (Dev.). Briggs Gully, Honeoye Lake, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 55.
34129. **Platyostoma minutum** Girty. Holotype.  
Three Forks (Dev.). Soda Butte Creek, Yellowstone  
National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 506, pl.  
66, figs. 7a, 7b.
4802. **Platyostoma ventricosa** Conrad. Plastotype.  
Oriskany (Lower Dev.). Albany County, New York.  
Hall, Nat. Hist. N. Y., Pal. III, 1859, p. 469, pl. 113, figs. 7, 8.
13946. **Platyschisma? ambiguum** Walcott. Cotypes.  
Upper Devonian. The Gate, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 188, pl. 17, figs.  
3, 3a.
3626. **Platyschisma depressum** Dana. Cotypes.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 707, Atlas, pl. I-  
figs. 2a, 2b.
13947. **Platyschisma mccoysi** Walcott. Cotype.  
Upper Devonian. Newark Mountain, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 188, pl. 17, figs.  
I-1c.



3625. **Platyschisma oculus** Morris. Plesiotypes.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 707, Atlas, pl. 10,  
fig. 1.
- Platystoma minutum** Girty. See **Platyostoma minutum**.
41167. **Platystrophia acutilirata** (Conrad). Plesiotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Cummings, Amer. Journ. Sci. (4), XV, 1903, p. 48, fig. 25.
26887. **Platystrophia biforata** (Schlotheim). Plesiotype.  
Ordovician. Pulkowa, Russia.  
Cummings, Amer. Journ. Sci. (4), XV, 1903, p. 15, figs. 6a-6f.
34139. **Platystrophia biforata** (Schlotheim). Plesiotype.  
Clinton (Sil.). Gassport, New York.  
Cummings, Amer. Journ. Sci. (4), XV, 1903, p. 42, figs. 23a-23f.
34138. **Platystrophia dentata** (Pander). Plesiotype.  
Ordovician. Pulkowa, Russia.  
Cummings, Amer. Journ. Sci. (4), XV, 1903, p. 10, fig. 4 B.
35408. **Platystrophia lynx** (Von Buch). Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 21, 22.
158057. **Platyrochus claibornensis** de Gregorio. Plesiotypes.  
158065. Claibornian (Eocene). Claiborne, Alabama.  
158066. Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 77, pl. 5,  
figs. 10-12.
158040. **Platyrochus goldfussi** (Lea). Plesiotypes.  
Claibornian (Eocene). Claiborne, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 76, pl. 5,  
figs. 2-5, 7.
158012. **Platyrochus stokesi** (Lea). Plesiotypes.  
to Claibornian (Eocene). Claiborne, Alabama.  
158015. Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 74, pl. 4,  
figs. 20-24; pl. 5, fig. 8.
25596. **Plecia pealei** Scudder. Cotypes.  
Older Tertiary. Twin Creek, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terrs., 1890,  
p. 585, pl. 4, figs. 10, 12.
46278. **Plethocardia suberecta** Ulrich. Holotype.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. M  
1892, p. 245, fig. 29; Geol. and Nat. Hist. Surv. Minn.,  
Rept., III, Pt. II, 1894, p. 577, pl. 40, figs. 25-27.



46279. *Plethocardia umbonata* Ulrich. Holotype.  
Black River (Ord.). Six miles south of Cannon Falls,  
Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1892, p. 244, fig. 28; Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1894, p. 576, pl. 40, figs. 22-24.
28137. *Plethospira cassina* Whitfield. Plesiotype.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1009, fig. 7a.
45956. *Plethospira semele* (Hall). Plesiotype.  
Utica (Ord.). Graf, Iowa.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1010, pl. 70, fig. 8.
45957. *Plethospira striata* Ulrich. Holotype.  
Richmond (Ord.). Hanover, Butler County, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1011, pl. 70, fig. 7.
163460. *Pleurodesma floridana* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 57,  
fig. 30.
107689. *Pleurodon woodii* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 600,  
pl. 24, fig. 10.
115718. *Pleurodonte bowdeniana* Simpson. Cotypes.  
115719. Miocene. Bowden, St. Thomas, Jamaica, West Indies.  
Dall, Proc. U. S. Nat. Mus., XVII, 1894, p. 450, pl. 16, figs. 3-5.
12336. *Pleuromya newtoni* Whitfield. Cotypes.  
Jurassic. Two miles south of Belle Fourche River, near  
Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 367, pl. 5, figs. 19, 20.
28958. *Pleuromya subcompressa* (Meek). Plesiotypes.  
to Jurassic. Yellowstone National Park.  
28961. Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 626, pl.  
74, figs. 8-11.
27140. *Pleurophorella papillosa* Girty. Holotype and paratype.  
Cisco (Upper Carb.). Graham, Young County, Texas.  
Girty, Proc. U. S. Nat. Mus., XXVII, 1904, p. 729, pl. 45, figs.  
4-6; pl. 46, fig. 5.



4184. **Pleurophorus ? calhouni** (Meek & Hayden). Cotypes.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 62, pl. 2, figs. 13a, 13b.  
See *Edmondia calhouni*.
14388. **Pleurophorus meeki** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 246, pl. 8, fig. 3.
6499. **Pleurophorus oblongus** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebraska (Hayden), 1872,  
p. 212, pl. 10, figs. 4a-c.
1017. **Pleurophorus occidentalis** Meek and Hayden. Holotype.  
Upper Carboniferous. Region of Nemaha, Nebraska.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 80; Pal.  
Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV, 1864,  
p. 35, pl. 1, figs. 11a, 11b.
9454. **Pleurophorus subcostatus** Meek and Worthen. Plesiotypes.  
Upper Carboniferous. Coyote Creek, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.,  
1881, p. 27, pl. 3, fig. 8.
35297. **Pleurophorus subcostatus** Meek and Worthen. Plesiotypes.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle,  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 444, pl. 9,  
figs. 11, 12.
4182. **Pleurophorus ? subcuneatus** Meek and Hayden. Cotypes.  
Permian. Near mouth of Smoky Hill River, Kansas.  
Meek and Hayden, Trans. Albany Inst., IV, 1858, p. 81 (as *P.*  
(*Cardinia*) *subcuneata*); Proc. Acad. Nat. Sci. Phila., for  
1859, p. 29; Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 61, pl. 2, fig. 3.
35253. **Pleurophorus taffi** Girty. Cotypes.  
35254. Upper Coal Measures. Near Lehigh, and Atoka quad-  
rangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 584,  
pl. 72, figs. 2a-2c.
17897. **Pleurohynchus antiqua** Owen. Holotype.  
Ordovician. Iowa?  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 2 B,  
fig. 19.  
= *Conocardium antiquum*.
112083. **Pleurotoma albida** Perry. Hol  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890  
pl. 4, fig. 8a.



61544. **Pleurotoma barretti** Guppy. Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 290,  
pl. 17, fig. 6.
162535. **Pleurotoma (Borsonia) bartschi** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 200, pl. 9, fig. 1.
136965. **Pleurotoma boadicea** Dall. Holotype.  
Oligocene. Oak Grove, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl.  
41, fig. 4.
162534. **Pleurotoma (Borsonia) dalli** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 201, pl. 6, fig. 2.
12458. **Pleurotoma ? hitzi** (Meek). Holotype.  
Colorado (Cret.). Opposite Fort Shea, Missouri River.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 161, pl. 34, fig. 4.
162533. **Pleurotoma (Borsonia) hooveri** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 201, pl. 10, fig. 1.
115579. **Pleurotoma jamaicense** Guppy. Holotype.  
Miocene. Jamaica, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 290,  
pl. 16, fig. 6.
130351. **Pleurotoma lapenotierei** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, pl. 43,  
fig. 14.
147038. **Pleurotoma lerchi** Vaughan. Holotype.  
Claibornian (Eocene). Hammets Branch, near Mount  
Lebanon, Louisiana.  
Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 32, pl. 2,  
fig. 1.
147039. **Pleurotoma ludoviciana** Vaughan. Holotype.  
Claibornian (Eocene). Hammets Branch, near Mount  
Lebanon, Louisiana.  
Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 33, pl. 2,  
fig. 3.
115584. **Pleurotoma miranda** Guppy. Holotype.  
Miocene. Jamaica, West Indies.  
Guppy, Proc. Sci. Assoc. Trinidad, 1882, p. 178, pl. 7, fig. 19.



1505. **Pleurotoma pagoda** Heilprin. Holotype.  
Eocene. Alabama.  
Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 149, fig. 1.
162554. **Pleurotoma (Leucosyrinx) pedroana** Arnold. Holotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 202, pl. 9, fig. 4.
8916. **Pleurotoma platysoma** Heilprin. Holotype.  
Eocene. Atacosa County, Texas.  
Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 150, pl. fig. 3.
111629. **Pleurotoma (Drillia) pseudeturnea** (Heilprin). Plesiotypes.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 114, pl. 21, figs. 8-12.
147041. **Pleurotoma sancti-mauritii** Vaughan. Cotypes.  
Claibornian (Eocene). St. Maurice, Louisiana.  
Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 32, pl. 2, fig. 2.
162556. **Pleurotoma (Spirotropis) smithi** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 216, pl. 6, fig. 13.
147042. **Pleurotoma stantoni** Vaughan. Holotype.  
Claibornian (Eocene). St. Maurice, Louisiana.  
Vaughan, Bull. No. 142, U. S. Geol. Surv., 1897, p. 34, pl. 2, fig. 5.
1509. **Pleurotoma venusta** Heilprin. Holotype.  
Eocene. Jackson, Mississippi.  
Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 150, fig. 2.  
*Pleurotomaria* (sp. undet.) Owen = *Liospira lenticulare*.
15074. **Pleurotomaria coronula** Hall. Holotype.  
Upper Carboniferous. Weston, Missouri.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah, 1852, p. 413, pl. 2, figs. 6a-6d.  
= *Treospira sphærolata*.
24527. **Pleurotomaria grayvillensis** Norwood and Pratten. Plesiotypes.  
Upper Carboniferous. Wild Band Pockets, Arizona.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 219; Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 140, pl. 34, fig. 5a.
1002. **Pleurotomaria humerosa** Meek and Hayden. Cotypes.  
Upper Carboniferous. Grasshopper Creek, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1858, p. 264; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 46, pl. 1, figs. 14a, 14b.



6568. *Pleurotomaria inornata* Meek. Holotype.  
Upper Carboniferous. Mortons Shaft, Nebraska City,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 232,  
pl. 4, fig. 14.
34126. *Pleurotomaria isaacsi* Hall and Whitfield (?) Plesiotype.  
Three Forks (Dev.). Wall Canyon, Clark Fork Valley,  
Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 505, pl.  
66, figs. 5a, 5b.
17331. *Pleurotomaria lonensis* Walcott. Cotype.  
Upper Pogonip (Ord.). Lone Mountain, near Eureka,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 80, pl. 11, fig. 22.
19506. *Pleurotomaria marrotiana* D'Orbigny. Holotype.  
Turonien (Cret.). Ribérac, Dordogne, France.  
D'Orbigny, Paleont. Française, Terr. Cret., II, 1842-43, p. 267, pl.  
202, figs. 5, 6.
3628. *Pleurotomaria morrisiana* McCoy. Plesiotypes.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 706, Atlas, pl. 9,  
figs. 15, 15a, 16.
17900. *Pleurotomaria muralis* Owen. Holotype.  
Ordovician. Lower Fort Garry, Red River of the North,  
Manitoba, Canada.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 581,  
pl. 2, fig. 6.
14413. *Pleurotomaria nevadensis* Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 259, pl. 24, figs.  
2, 2a.
14414. *Pleurotomaria nodomarginata* McChesney. Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 259, pl. 18, fig. 15.
3661. *Pleurotomaria nuda* Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 706, Atlas, pl. 9,  
figs. 17a-c.
6598. *Pleurotomaria perhumerosa* Meek. Cotypes.  
7025. Upper Carboniferous. Mortons Shaft, Nebraska City,  
Nebraska, and Rulo, Kansas.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 232,  
pl. 4, figs. 13a-13b.



8926. *Pleurotomaria perizomata* White. Cotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl., 1881,  
p. 31, pl. 3, figs. 5a-5c.
30239. *Pleurotomaria stantoni* Shattuck. Holotype.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 30, pl. 20, figs.  
1, 2.
1003. *Pleurotomaria subturbinata* Meek and Hayden. Holotype.  
Upper Carboniferous. Near Helena, Kansas.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1858, p. 264;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 47, pl. 1, fig. 13.
7753. *Pleurotomaria taggerti* Meek. Holotype.  
Upper Carboniferous. Horseshoe Mountain, South Park,  
Colorado.  
Meek, Seventh Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 231, in a  
footnote.—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr.,  
Pt. I, 1883, p. 140, pl. 34, figs. 1a, 1b.  
= *Euconospira taggarti*.
97353. *Pleurotomella chariessa pistillata* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 41,  
pl. 3, fig. 3.
20261. *Plicatula arenaria* Meek. Cotype.  
Colorado (Cret.). Covero, New Mexico.  
Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and  
Green Riv., Macomb, 1876, p. 126, pl. 1, figs. 5a-c.—Stanton,  
Bull. 106, U. S. Geol. Surv., 1893, p. 70, pl. 9, figs. 3, 4.
111619. *Plicatula densata* Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 35, pl. 5, figs.  
3-8.
139082. *Plicatula filamentosa concentrica* Dall. Cotypes.  
Eocene. Wahtubbee Hills, Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 762.
8048. *Plicatula hydrotheca* White. Cotypes.  
Colorado (Cret.). Head of Waterpocket Canyon, south-  
ern Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 279,  
pl. 6, figs. 3a, 3b.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
1893, p. 69, pl. 9, figs. 1, 2.



9863. *Plicatula incongrua* Conrad. Cotypes.  
Washita (Lower Cret.). Between El Paso and Frontera,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 153, pl. 6, figs. 10a, 10b.
157838. *Plicatula ostreiformis* Stanton. Cotypes.  
Lower Tejon (Eocene). One mile southeast of Lower  
Lake, Lake County, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1038, pl. 63, figs. 5, 6.
115536. *Plicatula vexillata* Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 436, pl. 17, fig. 7.
115732. *Pododesmus scopelus* Dall. Holotype.  
Oligocene. Rock Bluff, Chattahoochee River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 779,  
pl. 30, fig. 8.
37971. *Poliochera punctulata* Scudder. Holotype.  
Upper Coal Measures. Braidwood, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 444, pl. 39,  
figs. 2, 6; Foss. Insects N. America, 1890, p. 420, pl. 31, figs.  
2, 6.
25590. *Poliomyia recta* Scudder. Holotype.  
Older Tertiary. Green River, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890,  
p. 556, pl. 9, figs. 19, 21.
38144. *Polyernus complanatus* Scudder. Holotype.  
Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 343, pl. 32,  
figs. 8, 11; Foss. Insects N. America, I, 1890, p. 307, pl. 18,  
figs. 8, 11.
38155. *Polyernus laminarum* Scudder. Cotypes.  
Upper Coal Measures. Campbells Ledge, near Pittston,  
Pennsylvania.  
Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 343, pl. 31,  
fig. 1; Foss. Insects N. America, I, 1890, p. 307, pl. 17, fig. 1.
25525. *Polygraphus wortheni* Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 158, pl. 12, fig. 13.
112954. *Polynices (Amauropsis) burnsii* Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 377,  
pl. 22, fig. 33.



114420. **Polynices (Lunatia) internus** (Say). Plesiotypes.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 372,  
pl. 20, fig. 7.
44075. **Polypora approximata** Ulrich. Cotypes.  
44076. Chester (Miss.). Litchfield and Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 599, pl. 61, figs. 5-5a.
43792. **Polypora cestriensis** Ulrich. Cotype and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 594, pl. 55, figs. 4-4b; pl.  
60, figs. 7b, 7c.
43791. **Polypora complanata** Ulrich. Figured sections of cotypes.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 597, pl. 60, figs. 6b, 6c.
43446. **Polypora distincta** Ulrich. Holotype.  
Upper Coal Measures. Springfield, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 603, pl. 61, figs. 7-7a.
43789. **Polypora ? gracilis** Ulrich. Plesiotype.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 590, pl. 61, fig. 10a.
44073. **Polypora halliana** Prout. Plesiotype and figured sections.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 587, pl. 59, figs. 5b, 5c.
43485. **Polypora impressa** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 72, pl. 13, figs. 8, 8a.
44074. **Polypora incepta** Hall? Figured section of plesiotype.  
Waldron (Sil.). Waldron, Indiana.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 358, pl. 55, fig. 1.
44077. **Polypora maccoyana** Ulrich. Cotypes.  
Keokuk (Miss.). Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 588, pl. 59, figs. 3-3d.
43445. **Polypora radialis** Ulrich. Cotypes.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 591, pl. 60, figs. 1-1d.
43447. **Polypora retrorsa** Ulrich. Cotype.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 591, pl. 59, figs. 6-6d.
43444. **Polypora shumardi** Prout. Plesiotype and figured sections.  
Hamilton (Dev.). Utica, Indiana.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 586, pl. 55, figs. 2-2d.



44078. *Polypora simulatrix* Ulrich. Cotypes.  
Keokuk (Miss.). Keokuk, Iowa (Nauvoo, Illinois, in error).  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 589, pl. 59, figs. 4-4b.
43790. *Polypora spinulifera* Ulrich, var. Cotype.  
Chester (Miss.). Near Red Oak, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 598, pl. 61, figs. 4-4a.
6523. *Polypora submarginata* Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 154, pl. 7, figs. 7a, 7b.
43448. *Polypora whitei insculpta* Ulrich. Holotype.  
Upper Coal Measures. Springfield, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 600, pl. 62, fig. 1.
41813. *Pontocypris* (?) *acuminata* Ulrich. Holotype.  
Waverly (Miss.). Moots Run, near Granville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 210, pl. 17, figs. 8a-c.
41333. *Pontocypris* (?) *illinoisensis* Ulrich. Holotype.  
Richmond (Ord.). Savannah, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 107, pl. 10, figs. 16a-c.
27202. *Popanoceras ganti* Smith. Holotype.  
Upper Coal Measures. Graham, Young County, Texas.  
Smith, Mon. XLII, 1903, p. 132, pl. 21, figs. 14-16.
21715. *Popanoceras walcotti* White. Holotype.  
Permian. Military Crossing of the Big Wichita, Baylor County, Texas.  
White, Amer. Nat., XXIII, 1889, p. 117, pl. 1, figs. 9-11; Bull. No. 77, U. S. Geol. Surv., 1891, p. 21, pl. 1, figs. 9-11.—Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 134, pl. 22, figs. 9-11.
17277. *Porambonites obscurus* Hall and Whitfield. Holotype.  
Pogonip (Ord.). Pogonip Mountain, White Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 234, pl. 1, fig. 16.  
[Is not a *Porambonites*. May be a *Parastrophia* or a rhynchonelloid.]
11409. *Porites ramosa* (Lonsdale). Plesiotypes.  
Upper Oligocene. Jacksonboro, Georgia.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 195, pl. 3, figs. 5, 6.
38204. *Poroblattina complexinervis* Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 139, pl. 11, fig. 14.



38203. **Poroblattina fossa** Scudder. Cotypes.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 137, pl. 11,  
fig. 15.
38106. **Poroblattina gratiosa** Scudder. Holotype.  
Lower Permian. Cassville, West Virginia.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 136, pl. 11,  
fig. 13.
28145. **Porocrinus shawi** Schuchert. Holotype.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 155, pl. 12, figs.  
1-3.
135690. **Poromya jamaicensis** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. VI, 1903, p.  
1509, pl., 56, fig. 23.
33901. **Posidonia? clathrata** Lea. Holotype.  
Upper Coal Measures. Near Wilkesbarre, Pennsylvania.  
Lea, Journ. Acad. Nat. Sci., Phila. (2), II, 1852, p. 205, pl. 20,  
fig. 1b.  
[Either Lima or Aviculopecten.]
33903. **Posidonia? distans** Lea. Holotype.  
Upper Coal Measures. Near Wilkesbarre, Pennsylvania.  
Lea, Journ. Acad. Nat. Sci. Phila. (2), II, 1852, p. 205, pl. 20,  
fig. 3b.  
[A fragment apparently of a pleurotomaroid gastropod.]
33902. **Posidonia? perstriata** Lea. Holotype.  
Upper Coal Measures. Near Wilkesbarre, Pennsylvania.  
Lea, Journ. Acad. Nat. Sci. Phila. (2), II, 1852, p. 205, pl. 20,  
fig. 3a.  
=Edmondia perstriata.
13918. **Posidonomya devonica** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 179, pl. 4, fig. 7.
14181. **Posidonomya? fragosa** Meek. Cotypes.  
Lower Carboniferous. White Pine Mountains, near Ham-  
ilton, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 92,  
pl. 3, figs. 8, 8a; p. 249, pl. 3, figs. 9-11.  
=Lunulicardium fragosum.
13919. **Posidonomya lævis** Walcott. Cotypes.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 178, pl. 4, fig. 6.



112534. **Potamides (Pyrazisinus) acutus** Dall. Holotype.  
Oligocene. Hillsboro River, above Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 289, pl. 22, fig. 19.
112533. **Potamides (Pyrazisinus) cornutus** Heilprin. Plesiotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 288, pl. 15, fig. 3.
113370. **Potamides hillsboroënsis** Heilprin. Plesiotypes.  
Oligocene. Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 286, pl. 15, fig. 12.
113377. **Potamides (Pyrazisinus) scalatus** (Heilprin). Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 289, pl. 15, figs. 1, 7, 8, 10b.  
See *Cerithidea scalata*.
113375. **Potamides (Pyrazisinus) scalatus ecarinatus** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 289, pl. 15, fig. 4.
112525. **Potamides (Lampanella) transecta** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 180, pl. 11, fig. 7; Pt. II, 1892, p. 287.
13393. **Potamis pullatus** Gould. Holotype.  
Post Tertiary. San Diego, California.  
Gould, Rept. Expl. and Surv. R. R. Miss. to Pacific Ocean, V, 1856, p. 333, pl. 11, fig. 23.  
*Poteriocrinites*. See *Poteriocrinus*.
8066. **Poteriocrinus montanaensis** Meek. Holotype.  
Lower Carboniferous. Old Baldy, near Virginia City, Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 469, footnote as *Poteriocrinites montanensis*.—White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 128, pl. 3, fig. 6a.  
= *Poteriocrinus* (*Scaphiocrinus*) *montanaensis*.
39937. **Poteriocrinus municipalis** Troost. Chirotype.  
Mississippian. Lawrence County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.



43592. **Prasopora conoidea** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 249, pl. 16, figs. 11-15.
43590. **Prasopora contigua** Ulrich. Figured section of holotype.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 249, pl. 16, figs. 24-26.
43588. **Prasopora insularis** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 251, pl. 16, figs. 18-23.
43589. **Prasopora insularis fillmorensis** Ulrich. Figured sections  
of holotype.  
Black River (Ord.). Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 252, pl. 16, figs. 18-20.
43587. **Prasopora lenticularis** Ulrich. Holotype and figured  
sections.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 253, pl. 17, figs. 22-25.
43691. **Prasopora nodosa** Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Nashville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 245, pl. 11,  
figs. 1-1b.
43586. **Prasopora oculata** Foord. Plesiotypes and figured sections.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 252, figs. 15, c, d, p. 248.
43175. **Prasopora patera** Ulrich and Bassler. Cotypes and figured  
sections.  
Trenton (Ord.). Four miles north of Columbia, Tennessee.  
Ulrich and Bassler in Hayes and Ulrich, U. S. Geol. Surv., Folio  
95, 1903, illustration sheet, figs. 44-46; Smithsonian Misc.  
Coll., Quart., XLVII, 1904, p. 20, pl. 6, figs. 11-14.
45052. **Prasopora selwyni** Nicholson. Figured section of plesiotypes.  
45053. Trenton (Ord.). Near Cannon Falls, Minnesota, and  
Ottawa, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 248, figs. 15a-b; p. 250, pl. 16, figs. 16-17.
43593. **Prasopora simulatrix** Ulrich. Cotypes and figured sections.  
43594. Trenton (Ord.). Burgin, Kentucky.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 245, pl. 16, figs. 3, 5, 8, 10.



44054. **Prasopora simulatrix orientalis** Ulrich. Cotypes and  
44055. figured sections.  
Trenton (Ord.). Trenton Falls, New York, and Ottawa  
Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 246, pl. 16, figs. 1, 2, 6, 7.
115411. **Prenaster loveni** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet.-Akad. Hand., XIII, 6, 1874, p. 34  
pl. 6, figs. 11-15.
38853. **Prestwichia danæ** Meek and Worthen. Plesiotypes.  
38854. Upper Coal Measures. Mazon Creek, Grundy County,  
Illinois.  
Packard, Mem. National Acad. Sci., III, 1886, p. 146, pl. 6,  
figs. 1, 1a, 2, 2a.  
See *Belinurus lacoiei*.
38857. **Prestwichia longispina** (Packard). Cotypes.  
38858. Upper Carboniferous. Butler Mine, Pittston, Pennsyl-  
vania.  
Packard, Amer. Nat., XIX, 1885, p. 292 (as *Euproops longi-*  
*spina*); Mem. Nat. Acad. Sci., III, 1886, p. 147, pl. 5, fig. 4;  
pl. 6, fig. 3.
35374. **Prestwichia signata** Beecher. Plastotype.  
Lower Permian. Three miles west of Stockdale, Kansas.  
Beecher, Amer. Journ. Sci. (4), XVIII, 1904, p. 23, text fig. 1;  
p. 24.
41339. **Primitia celata** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 653, pl. 43, figs. 67, 68.
41337. **Primitia centralis** Ulrich. Holotype and paratype.  
41338. Trenton (Ord.). }  
Lorraine (Ord.). } Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 130, pl.  
10, figs. 1, 2a-2c.
41422. **Primitia cestriensis** Ulrich. Holotype.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 201.
41419. **Primitia cestriensis caldwellensis** Ulrich. Holotype.  
Chester (Miss.). Claxton P. O., Caldwell County, Ken-  
tucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 202, pl.  
14, figs. 7a-c.
41346. **Primitia cincinnatiensis** (Miller). Plesiotypes.  
Lorraine (Ord.). Clarksville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 132, pl.  
10, figs. 5a, b, 6a-c.



41348. **Primitia duplicata** Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 654, pl. 43, figs. 60, 61.
41341. **Primitia gibbera** Ulrich. Holotype.  
Utica (Ord.). Near Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 655, pl. 43, figs. 57-59.
41827. **Primitia glabra** Ulrich. Holotype.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 134, pl. 10, figs. 9a-c.
41427. **Primitia granimarginata** Ulrich. Cotypes.  
Chester (Miss.). Near Grayson Springs Station, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 201, pl. 12, figs. 8a, b.
41332. **Primitia impressa** Ulrich. Cotypes.  
Richmond (Ord.). Savannah, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 131, pl. 10, figs. 3a-3c, 4a-4c.
41349. **Primitia mammata** Ulrich. Holotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 652, pl. 43, figs. 78-81.
41347. **Primitia medialis** Ulrich. Holotype.  
Richmond (Ord.). Jefferson County, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 132, pl. 10, figs. 7a, b.
41336. **Primitia micula** Ulrich. Cotypes.  
Trenton (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 653, pl. 43, figs. 69-72.
41340. **Primitia milleri** Ulrich. Holotype.  
Richmond (Ord.). Weisburg, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 133, pl. 12, figs. 2a-2c.
41838. **Primitia minutissima** Ulrich. Holotype.  
Stones River (Ord.). Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 651, pl. 45, fig. 31.
41334. **Primitia nitida** Ulrich. Holotype.  
Trenton (Ord.). Near Paris, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 135, pl. 8, fig. 7.



41552. **Primitia nodosa** Ulrich. Cotypes.  
 41553. **Utica** and **Lorraine** (Ord.). Cincinnati, Ohio.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 134, pl. 10, figs. 11a, b, 12a, b.  
 = **Ulrichia nodosa**.
41436. **Primitia perminima** Ulrich. Holotype.  
 Trenton (Ord.). Mouth of Licking River, Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 131, pl. 7, fig. 7.
41345. **Primitia rudis** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 136, pl. 10, figs. 8a-8c.
41343. **Primitia sancti pauli** Ulrich. Holotype.  
 Black River (Ord.). St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 652, pl. 43, figs. 73, 74.
41362. **Primitia (?) sculptilis** Ulrich. Holotype.  
 Trenton (Ord.). Perryville, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 136, pl. 8, fig. 6.  
 = **Halliella sculptilis**.
41425. **Primitia simulans** Ulrich. Holotype.  
 Chester (Miss.). Chester, Illinois.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 201.
41426. **Primitia subæquata** Ulrich. Holotype.  
 Chester (Miss.). Claxton P. O., Caldwell County, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 202, pl. 14, figs. 8a-c.
41342. **Primitia tumidula** Ulrich. Cotypes.  
 Utica (Ord.). Near Spring Valley, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 655, pl. 43, figs. 62-65.
41344. **Primitia uphami** Ulrich. Holotype.  
 Trenton (Ord.). Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 651, pl. 43, fig. 66.
41462. **Primitiella constricta** Ulrich. Cotypes.  
 41463. **Stones River** (Ord.). High Bridge, Kentucky; Minneapolis, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 647, pl. 43, figs. 48-52.



41476. **Primitiella fillmorensis** Ulrich. Holotype.  
Black River (Ord.). Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 649, pl. 45, figs. 28-30.
41350. **Primitiella limbata** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 648, pl. 43, figs. 53-56.
41475. **Primitiella simulans** Ulrich. Cotypes.  
Black River (Ord.). Near Fountain, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 648, pl. 43, figs. 26-28.
41467. **Primitiella unicornis** (Ulrich). Plesiotypes.  
Utica (Ord.). One mile west of Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 649, pl. 43, figs. 75-77.  
See *Leperditia unicornis*.
20259. **Prionocyclus ? macombi** Meek. Cotype.  
Colorado (Cret.). Banks of Canadian, New Mexico.  
Meek, Rept. Expl. Exped. Santa Fé to junction of Grand and  
Green Riv., Macomb, 1876, p. 132, pl. 2, figs. 3a-d.
20259. **Prionocyclus macombi** Meek. Cotype and plesiotypes.  
22940. Colorado (Cret.). Banks of Canadian, New Mexico, and  
near Mancos, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 172, pl. 4<sup>r</sup>,  
figs. 1-5.
223. **Prionocyclus woolgari** (Mantell). Plesiotypes.  
Fort Benton (Cret.). Southeast base of Black Hills, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 455, pl. 7, figs.  
1a-d.  
= *Prionotropis woolgari*.
12283. **Prionocyclus wyomingensis** Meek. Plesiotypes.  
Fort Benton (Cret.). East Fork of Beaver Creek, Black  
Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 440, pl. 14, figs. 1-3.
7729. **Prionocyclus wyomingensis** Meek. Cotype.  
Colorado (Cret.). Medicine Bow River, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 35, pl. 15, figs. 1a-e.—Stanton, Bull. No. 106, U. S. Geol.  
Surv., 1893, p. 171, pl. 40, figs. 1-4.  
See *Ammonites serratocarinatus*.



22941. **Prionotropis hyatti** Stanton. Cotypes  
 Colorado (Cret.). Huerfano Park, Colorado.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 176, pl. 4,  
 figs. 5-8.
8629. **Prionotropis ? lævianus** (White). Holotype  
 Colorado (Cret.). Ojo de los Cuervos, New Mexico.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 178, pl. 4,  
 figs. 3, 4.  
 See *Ammonites lævianus*.
223. **Prionotropis woolgari** (Mantell). Plesiotypes  
 Colorado (Cret.). Missouri River, five miles below mouth  
 of Vermillion River, South Dakota.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 174, pl. 4,  
 figs. 1-4.  
 See *Prionocyclus woolgari*.
3681. **Prismodictya telum** (Hall). Cotypes  
 Chemung (Dev.). Cattaraugus County, New York.  
 Hall, Thirty-fifth Ann. Rept. N. Y. State Mus. Nat. Hist., 1884,  
 p. 470.—Hall and Clarke, Mem. II, State Mus. N. Y., 1898  
 (Oct., 1899), p. 80, pl. 17, figs. 6, 8.
43443. **Prismopora minima** Ulrich. Cotypes and figured sections  
 Coal Measures (Upper Carb.). Sparta, Illinois.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 506, p. 78, figs. 1-1c.
43692. **Prismopora serrulata** Ulrich. Cotype and figured sections  
 Chester (Miss.). Sloans Valley, Kentucky.  
 Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 41, pl. 2,  
 figs. 2-2f.
8065. **Prismopora triangulata** (White). Cotypes  
 Upper Carboniferous. Yampa Plateau, Colorado.  
 Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 340, pl. 1, fig. 15.  
 See *Ptilodictya triangulata*.
43782. **Prismopora trifolia** Rominger. Plesiotypes  
 Keokuk (Miss.). Keokuk, Iowa.  
 Ulrich, Geol. Surv. Ill., VIII, 1890, p. 505, pl. 77, fig. 4b.  
 = *Phractopora trifolia*.
43264. **Proboscina frondosa** (Nicholson). Plesiotype  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 119, pl. 1, fig. 28.
43265. **Proboscina tumulosa** Ulrich. Holotype  
 Black River (Ord.). St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
 1893, p. 119, pl. 1, fig. 24.



25551. **Procas vinculatus** Scudder. Cotype.  
Older Tertiary. Roan Mountains, western Colorado, and  
White River, eastern Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 102, pl. 11, fig. 3.  
Productella. See also Productus (Productella).
35171. **Productella alifera** Girty. Cotypes.  
Madison (Miss.). South side of Soda Butte Creek, Yellow-  
stone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 530, pl. 68,  
figs. 10a, 10b, 10c.
35170. **Productella cooperensis** Swallow. Plesiotypes.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range,  
Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 528, pl. 68,  
figs. 8a, 8b, 8c, 9a, 9b.
13814. **Productella hallana** Walcott. Plesiotypes.  
Base of Upper Devonian. Near Fort Resolution, Great  
Slave Lake, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 91, pl. 13, figs. 4a-d  
(as Productus ——— ?).  
See Productus (Productella) hallanus and P. dissimilis ?
11446. **Productella semiglobosa** Nettelroth. Plesiotype.  
33929. Ouray (Upper Dev.). Seven localities in central Colorado.  
3 1. Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 42,  
pl. 3, figs. 7-10.
- Productus ——— ? Meek = Productella hallana.  
Productus ——— ? Meek = Productus (Productella) lachrymosa  
stigmata.
- Productus (sp. indet.) Hall = Productus cora.
15058. **Productus cora** d'Orbigny. Plesiotypes.  
Upper Carboniferous. Weston, Missouri.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake,  
Utah, 1852, p. 411, pl. 3, fig. 4 (as Productus sp. indet.).
- 35349 **Productus cora** d'Orbigny. Plesiotypes.  
to Upper Carboniferous. Scotch Creek and Sandstone Moun-  
35352. tain, Rico quadrangle; Bear Creek and Big Percent  
Creek, Durango quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 364, pl. 4,  
figs. 1, 2, 3, 4.
8482. **Productus costatus** Sowerby? Plesiotypes.  
9179. Upper Carboniferous. Madison County, Iowa.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 109, pl. 8, figs. 2a-2d.



24534. **Productus costatus** Sowerby? Plesiotypes  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 159, pl. 6, figs. 6a, 6b.
15143. **Productus costatus** Sowerby? var. Plesiotypes  
Upper Carboniferous. White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 6, pl. 7, figs. 4-4b.
13824. **Productus dissimilis** Hall? Plesiotypes  
Base of Upper Devonian. Clear Water River, Mackenzie River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 91, pl. 13, figs. 3a-c  
= *Productella hallana*.
14216. **Productus elegans** Norwood and Pratten. Plesiotypes  
Lower Carboniferous. North of Snowstorm Hill, Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 268, pl. 5, figs. 3, 4.  
[Does not appear to be like the specimens from the Kaskaskia and the Mississippi Valley.]
14217. **Productus flemingi burlingtonensis** Hall. Plesiotypes  
Lower Carboniferous. North of Snowstorm Hill, Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 265, pl. 5, figs. 9-12.  
= *Productus burlingtonensis*.
3633. **Productus fragilis** Dana. Cotype  
Carboniferous. Wollongong Point, Illawarra, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 686; Atlas, I, 2, figs. 7-7d.
35168. **Productus gallatinensis** Girty. Cotype  
35169. Madison (Miss.). Crowfoot Ridge, Gallatin Range, divide between Gallatin River and Panther Creek, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 533, pl. 68, figs. 11a, 11b, 11c, 11d, 7a, 7b, 7c.
35346. **Productus gallatinensis** Girty. Plesiotypes  
to Hermosa (Upper Carb.). Near Cascade Creek, Engineer Mountain quadrangle; Bear Creek, Durango quadrangle, and San Juan Region, Colorado.  
35348. Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 361, pl. 1, figs. 4, 5, 6, 7, 8.
8040. **Productus giganteus** (Martin). Plesiotypes  
Lower Carboniferous. McCloud River, Shasta County, California.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1880, p. 132, pl. 36, figs. 1a-1c.



13816. **Productus (Productella) hallanus** Walcott. Cotypes.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 130, pl. 13, figs. 17, 17a.  
= *Productella hallana*.  
See *Productus dissimilis* ?
14191. **Productus hirsutiforme** Walcott. Cotype.  
White Pine (Lower Carb.). Applegate Canyon, White Pine District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 133, pl. 2, figs. 10, 10a.
35345. **Productus inflatus** McChesney. Plesiotypes.  
Hermosa? (Upper Carb.). Horseshoe Mountain, Leadville District, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 359, pl. 3, figs. 1, 2, 3.
13813. **Productus (Productella) lachrymosus limus** (Conrad). Plesiotype.  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 132, pl. 13, figs. 18, 18a.  
= *Productella lachrymosa lima*.
13814. **Productus (Productella) lachrymosa stigmata** Hall. Plesiotypes.  
Base of Upper Devonian. Lockhart River, Mackenzie River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 92, pl. 13, figs. 5a, 5b (as *Productus* — ?).
35183. **Productus lævicosta** White. Plesiotypes.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 534, pl. 69, figs. 9b, 9c.
14214. **Productus lævicostus** White? Plesiotype.  
Lower Carboniferous. North of Snowstorm Hill, Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 266, pl. 5; figs. 7, 8. — Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 534, pl. 69, fig. 9a.
6649. **Productus longispinus** Sowerby. Plesiotypes.  
Upper Carboniferous. Bellevue, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 161, pl. 6, fig. 7.
8496. **Productus longispinus** Sowerby. Plesiotypes.  
8497. Upper Carboniferous. Santa Fé, New Mexico, and Madison County, Iowa.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 118, pl. 8, figs. 5a-5d.



15138. **Productus longispinus** Sowerby. Plesiotypes.  
Upper Carboniferous. Fossil Hill, White Pine District,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 78,  
pl. 8, figs. 4, 4a.
25623. **Productus longispinus alaskensis** Schuchert. Cotypes.  
26003. Lower Carboniferous. Kuiu Island, Southern Alaska.  
Schuchert, Seventeenth Ann. Rept. U. S. Geol. Surv., 1897, p. 903.
15136. **Productus longus** Meek. Cotypes.  
Upper Carboniferous. Fossil Hill, White Pine Mountains,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 67,  
pl. 7, figs. 6-6b (named *P. longus* at end of description).
8494. **Productus mexicanus** Shumard? Plesiotype.  
Upper Carboniferous. Camp Cottonwood, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 120, pl. 8, figs. 6a-6c.
646. **Productus multistriatus** Meek. Cotypes.  
Upper Carboniferous. Long Valley, near Eureka, Nevada.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 309; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 350, pl. 1, figs. 8-8b.
15131. **Productus multistriatus** Meek. Plesiotypes.  
15133. Upper Carboniferous. Ruby Valley Range, and White  
Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 76,  
pl. 8, figs. 3-3e.
8491. **Productus muricatus** Norwood and Pratten. Plesiotype.  
Upper Carboniferous. Rock Creek, Lake County, Colo-  
rado.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 120, pl. 8, figs. 4a-4c.
13819. **Productus (Productella) navicella** (Hall). Plesiotype.  
Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv. 1884, p. 131, pl. 13, fig. 9.  
= *Productella navicella*.
8469. **Productus nebrascensis** Owen. Plesiotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 116, pl. 8, figs. 3c, 3d.
6995. **Productus nebrascensis** Owen. Plesiotype.  
24535. Upper Carboniferous. Bellevue, and Pawnee County,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden) 1872, p. 165,  
pl. 2, fig. 2; pl. 5, figs. 11a-d.



8470. **Productus nebrascensis** Owen. Plesiotype.  
Upper Carboniferous. Madison County, Iowa.  
White, Thirteenth Ann. Rept. Geol. Surv. Ind. 1884, p. 122, pl.  
24, figs. 7-9.
35357. **Productus nebraskensis** Owen. Plesiotypes.  
Hermosa (Upper Carb.). Hermosa Creek, Durango quad-  
rangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv. 1903, p. 370, pl. v,  
figs. 1, 2, 2a.
668. **Productus nevadensis** Meek. Cotypes.  
Upper Carboniferous. West side of Buell Valley, east of  
Eureka, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 64,  
pl. 8, figs. 2-2e.
35166. **Productus parviformis** Girty. Cotypes.  
35167. Madison (Miss.). Crowfoot Ridge, Gallatin Range, and  
Forellen Peak, Teton Range, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 536, pl.  
68, figs. 6a-6d.
8538. **Productus parvus** Meek and Worthen. Plesiotypes.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 83, pl. 5, figs. 6a, 6b.
6515. **Productus pertenuis** Meek. Cotypes.  
6984. Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 164,  
pl. 1, figs. 14a-c.
6652. **Productus prattenianus** Norwood. Plesiotypes.  
6790. Upper Carboniferous. Plattsmouth, and twenty miles west  
of Nebraska City, Union Ranch, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872,  
p. 163, pl. 2, figs. 5a-c.  
= *Productus cora*.
8466. **Productus prattenianus** Norwood. Plesiotypes.  
Upper Carboniferous. Exact locality unknown.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 113, pl. 7, figs. 1a-1c.  
= *Productus cora*.
15110. **Productus prattenianus** Norwood. Plesiotypes.  
Upper Carboniferous. White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 72,  
pl. 7, figs. 7, 7a.  
= *Productus cora*.



6993. **Productus punctatus** (Martin). Plesiotypes  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 169  
pl. 2, fig. 6; pl. 4, fig. 5.
8467. **Productus punctatus** (Martin). Plesiotypes  
8468. Upper Carboniferous. Grass Mountain, Ely Range,  
Nevada, and Madison County, Iowa.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 114, pl. 7, figs. 2a-2c.
35180. **Productus scabriculus** (Martin). Plesiotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yellow-  
stone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 531, pl. 64  
figs. 7a, 7b, 7c, 7d.
15061. **Productus semireticulatus** (Martin). Plesiotypes  
Upper Carboniferous. West of Fort Laramie, Wyoming.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 411, pl. 3, fig. 3.
15059. **Productus semireticulatus** (Martin). Plesiotypes  
Upper Carboniferous. West of Fort Laramie, Wyoming.  
Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah,  
1852, p. 411, pl. 3, figs. 5a, 5b.  
= *Productus cora*.
6532. **Productus semireticulatus** (Martin). Plesiotype  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 169  
pl. 5, figs. 7a, 7b.
8524. **Productus semireticulatus** (Martin). Plesiotype  
Upper Carboniferous. Southern Iowa.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 111, pl. 8, fig. 1c.
14215. **Productus semireticulatus** (Martin). Plesiotype  
Lower Carboniferous. North of Snowstorm Hill, De-  
Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I,  
1877, p. 267, pl. 5, figs. 5, 6.
14299. **Productus semireticulatus** (Martin). Plesiotype  
Upper Carboniferous. White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 267,  
pl. 7, fig. 5.
35181. **Productus semireticulatus** (Martin). Plesiotype  
35182. Madison (Miss.). Crowfoot Ridge, Gallatin Range, and  
Conant Creek, Teton Range, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 531,  
pl. 69, figs. 8a-8d.



- 35353 to 35356. **Productus semireticulatus hermosanus** Girty. Cotypes.  
Hermosa and Weber (Upper Carb.). Durango quadrangle  
and Leadville district, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 358, pl. 2,  
figs. 1-1c; 2-2b; 3-3b; 4-4b.
8523. **Productus semireticulatus ivesi** Newberry. Plesiotypes.  
Upper Carboniferous. Exact locality unknown.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 111, pl. 8, figs. 1a, 1b.
652. **Productus semistriatus** Meek. Cotypes.  
Upper Carboniferous. Timpanogos Canyon, near Utah  
Lake, Utah.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 309; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 349, pl. 1, figs. 7a, b;  
Rept U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 74, pl. 7,  
figs. 8, 8a.
13820. **Productus (Productella) shumardianus** (Hall). Plesiotype  
Middle and Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 129, pl. 14, fig. 1.  
= *Productella shumardiana*.
13817. **Productus (Productella) speciosus** (Hall). Plesiotype.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 133, pl. 13, fig. 8.  
= *Productella speciosa*.
630. **Productus subaculeatus** Murchison? Plesiotypes.  
Upper Devonian. West side of Buell Valley, east of  
Eureka, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 345,  
pl. 1, figs. 3a-3c.  
= *Productella subaculeata*.
13820. **Productus subaculeatus** Murchison? Plesiotypes.  
14014. Upper Devonian. White Pine and Eureka Districts.  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 36,  
pl. 3, figs. 7, 7b.
13822. **Productus (Productella) subaculeatus** (Murchison).  
14301. Plesiotype.  
Middle and Upper Devonian. Lower Carboniferous.  
Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 128, pl. 7, fig. 2,  
pl. 13, figs. 19, 19a.  
= *Productella subaculeata*.
15144. **Productus subhorridus** Meek. Cotypes.  
Upper Carboniferous. Moleen Peak, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 75,  
pl. 7, figs. 3-3b.



6868. **Productus symmetricus** McChesney. Plesiotypes.  
Upper Carboniferous. Rockford, near Nebraska City,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 167,  
pl. 5, figs. 6a, 6b; pl. 8, fig. 13.
11788. **Productus symmetricus** McChesney. Plesiotypes.  
Upper Carboniferous. La Salle County, Illinois.  
White, Thirteenth Ann. Rept. Geol. Surv. Ind., 1884, p. 123, pl. 25,  
figs. 1, 2.
13821. **Productus (Productella) truncatus** (Hall). Plesiotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 131, pl. 14, fig. 2.  
= *Strophalosia truncata*.
14579. **Proetus (Phæton) denticulatus** Meek. Cotypes.  
Middle Devonian. West side Steptoe Valley, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 49,  
pl. 1, figs. 10-10b.  
= *Phæthonides denticulatus*.
43021. **Proetus haldemani** Hall. Plastotype.  
Hamilton (Dev.). Pennsylvania.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 113,  
pl. 21, figs. 7, 8.
43016. **Proetus hesione** Hall. Plastotype.  
Scholarie (Dev.). Scholarie, New York.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 93,  
pl. 20, figs. 15, 16.
14243. **Proetus loganensis** Hall and Whitfield. Holotype.  
Waverly (Miss.). Logan Canyon, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 264, pl. 4, fig. 33.—Girty, Mon. XXXII, Pt. II, U. S.  
Geol. Surv., 1899, p. 577, pl. 71, fig. 15a.
43020. **Proetus nevadæ** Hall and Clarke. Plastotype.  
Devonian. Combs Peak, Eureka District, Nevada.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 124,  
pl. 23, fig. 19.
14242. **Proetus peroccidens** Hall and Whitfield. Cotypes.  
15236. Waverly (Miss.). Dry Canyon, Oquirrh Mountains, and  
Ogden Canyon, Wasatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 262, pl. 4, figs. 28-32.—Girty, Mon. XXXII, Pt. II,  
U. S. Geol. Surv., 1899, p. 576, pl. 71, figs. 14a, b.
43019. **Proetus ? planimarginatus** Meek. Plastotype.  
Devonian. Sylvania, Ohio.  
Meek, Geol. Surv. Ohio, Pal. I, 1873, p. 233, pl. 23, fig. 3.



46280. **Prolobella striatula** Ulrich. Holotype.  
Trenton (Ord.). Near Pleasant Grove, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 532, pl. 35, fig. 27.
38159. **Promylacris harei** Scudder. Holotype.  
Upper Coal Measures. Kansas City, Missouri.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 48, pl. 2, fig. 3.
38045. **Promylacris rigida** Scudder. Holotype.  
Upper Coal Measures. Braidwood, Illinois.  
Scudder, Mem. Boston Soc. Nat. Hist., IV, 1890, p. 405, pl. 31, fig. 6; Foss. Insects N. America, I, 1890, p. 379-381, pl. 23, fig. 6; Bull. 124, U. S. Geol. Surv., 1895, p. 50, pl. 3, fig. 1.—  
Sellards, Amer. Journ. Sci. (4), XVIII, 1904, p. 221, text fig. 36 (on p. 223).
38158. **Promylacris testudo** Scudder. Plesiotype.  
Upper Coal Measures. Mazon Creek, Grundy County, Illinois.  
Scudder, Bull. No. 124, U. S. Geol. Surv., 1895, p. 49, pl. 2, fig. 2.
26438. **Pronorites cyclolobus arkansiensis** Smith. Holotype.  
Lower Coal Measures. Pilot Mountain, Carroll County, Arkansas.  
Smith, Proc. Amer. Phil. Soc., XXXV, 1897, p. 57 (extract), pl. 24, figs. 1-4; Mon. XLII, U. S. Geol. Surv., 1903, p. 43, pl. 12, figs. 12-15.
40886. **Protaster miamiensis** Miller. Cotypes.  
Richmond (Ord.). Near Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 116, pl. 5, figs. 6, 6b.
6511. **Prothyris elegans** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr., 1872, p. 223, pl. 10, figs. 9a, 9b; Amer. Journ. Conch., VII, 1891, p. 8, pl. 1, fig. 3.
135733. **Protocardia jamaicensis** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1114, pl. 48, fig. 3.
1949. **Protocardia (Leptocardia?) pertenuis** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Deer Creek, North Platte, Wyoming.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 176, text figs. 13, 14.  
See *Cardium pertenuis*.
7897. **Protocardia salinaensis** (Meek). Holotype and paratype.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 174, pl. 2, figs. 13a-d.



298. **Protocardia (Leptocardia) subquadrata** (Evans and Shumard). Plesiotypes  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 175, pl. 29, figs. 8a-e.
15400. **Protocaris marshi** Walcott. Holotype  
Lower Cambrian. Parker's Farm, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 148, pl. 15, fig. 1; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 629, pl. 81, fig. 6.
43287. **Protocrisina exigua** Ulrich. Figured sections of cotype  
43288. Trenton (Ord.). Montreal, Canada; Trenton Falls, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 405, pl. 29, fig. 4c; pl. 33, figs. 11-11e.
46537. **Protoscolex covingtonensis** Ulrich. Holotype  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1879, p. 89, pl. 4, fig. 2.
46538. **Protoscolex ornatus** Ulrich. Cotype  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1879, p. 90, pl. 4, fig. 1, 1a.
46539. **Protoscolex simplex** Ulrich. Holotype  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1879, p. 91, pl. 4, fig. 1.
46540. **Protoscolex tenuis** Ulrich. Holotype  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1879, p. 90, pl. 4, fig. 1.
15309. **Protospongia fenestrata** Salter. Plesiotypes  
Middle Cambrian. Prospect Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 11, pl. 9, figs. 5a, 5b; Bull. No. 30, U. S. Geol. Surv., 1886, p. 90, pl. 1, figs. 2-2b.
45963. **Protowarthia cancellata** (Hall). Plesiotypes  
to Black River (Ord.). Chatfield, West St. Paul, and eight  
45967. miles south of Cannon Falls, Minnesota.  
Trenton (Ord.). Covington, Kentucky, and Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fr. Rept., III, Pt. II, 1897, p. 872, pl. 63, figs. 1-14.
45958. **Protowarthia concinna** Ulrich and Scofield. Holotype  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fr. Rept., III, Pt. II, 1897, p. 874, pl. 63, figs. 36-39.



45959. **Protowarthia granistriata** Ulrich. Cotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 870, pl. 63, figs. 28-30.
45961. **Protowarthia obesa** Ulrich. Cotypes.  
45962. Trenton (Ord.). Curdsville and Danville, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 874, pl. 63, figs. 45-47.
- 45968 **Protowarthia pervoluta** Ulrich and Scofield. Cotypes.  
to Black River (Ord.). Chatfield and St. Paul, Minnesota;  
45970. Curdsville, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 871, pl. 63, figs. 22-25.
45960. **Protowarthia planodorsata** Ulrich. Cotypes.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 871, pl. 63, figs. 31-35.
45971. **Protowarthia rectangularis** Ulrich and Scofield. Cotypes.  
45972. Stones River (Ord.). Mineral Point and Beloit, Wis-  
consin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 868, pl. 63, figs. 15-20.
45973. **Protowarthia subcompressa** Ulrich. Cotypes.  
45974. Richmond (Ord.). Versailles, Indiana; Hanover, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 873, pl. 63, figs. 40-44.
17454. **Protypus? clavatus** (Walcott). Holotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 656, pl. 98,  
fig. 4.  
See Ptychoparia? (subgenus?) clavata.
15424. **Protypus hitchcocki** (Whitfield). Plastotype.  
Lower Cambrian. Parker's Quarry, Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 211, pl. 31, fig. 4;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 655, pl. 98, fig. 6.
15421. **Protypus senectus** (Billings). Plesiotype.  
Lower Cambrian. East of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 213, pl. 31,  
figs. 2-2c; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 655,  
pl. 98, figs. 7-7c.
43788. **Proutella discoidea** Prout. Cotype and figured section.  
Keokuk (Miss.). Keokuk, Iowa. (Nauvoo, Illinois, in  
error.)  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 674, pl. 69, figs. 4 a-d.



20102. **Psammobia obscura** White. Cotypes.  
Puget (Cret.). Palace Camp and Carbonado, Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 61, pl. 10, figs. 4-6.
12328. **Psammobia ? prematura** Whitfield. Cotypes.  
Jurassic. East of Belle Fourche River, near Bear Lodge  
Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 374, pl. 5, fig. 31.
156871. **Psammobia (Gobræus) wagneri** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 977,  
pl. 25, fig. 10.
156881. **Psammosolen cummingsianus** (Dunker). Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 961,  
pl. 28, fig. 15.
292. **Pseudobuccinum nebrascense** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1857, p. 140.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 350, pl. 31,  
figs. 5 a-d.  
See Buccinum ? nebrascensis.
35068. **Pseudocrinites abnormalis** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 231,  
text fig. 30, pl. 35, figs. 10-12.
35070. **Pseudocrinites clarki** Schuchert. Cotypes.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Amer. Geol., XXXII, 1903, p. 237; Smithsonian Misc.  
Coll., Quart., XLVII, 1904, p. 233, pl. 36, figs. 4-7; pl. 39,  
fig. 14.
35066. **Pseudocrinites claypolei** Schuchert. Holotype.  
Manlius (Sil.). Clark's Mills, near New Bloomfield, Penn-  
sylvania.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 232,  
pl. 37, fig. 1.
35065. **Pseudocrinites elongatus** Schuchert. Holotype.  
Manlius (Sil.). Pleasant Valley, Bedford County, Penn-  
sylvania.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 235,  
text fig. 31; pl. 35, figs. 6, 7.
35071. **Pseudocrinites gordonii** Schuchert. Holotype and paratypes.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Amer. Geol., XXXII, 1903, p. 235; Smithsonian Misc.  
Coll., Quart., XLVII, 1904, pp. 229, 230, text fig. 29; pl. 38,  
figs. 8-12; pl. 39, figs. 11-13.



35072. **Pseudocrinites perdewi** Schuchert. Holotype and paratype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Amer. Geol., XXXII, 1903, p. 238; Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 236, text fig. 32; pl. 36, figs. 1-3; pl. 39, figs. 8-10.
35069. **Pseudocrinites stellatus** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Amer. Geol., XXXII, 1903, p. 236; Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 232, pl. 35, figs. 8, 9; pl. 39, fig. 7.
35067. **Pseudocrinites subquadratus** Schuchert. Holotype.  
Manlius (Sil.). Devils Backbone, near Cumberland, Maryland.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 234, pl. 35, figs. 4, 5.
30186. **Pseudodiadema emersoni** Clark. Cotype.  
Jurassic. Taylorsville, California.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 45, pl. 12, figs. 2a-e.
8311. **Pseudodiadema hilli** Clark. Holotype.  
Austin (Upper Cret.). Texas.  
Clark, Johns Hopkins Univ. Circ. No. 87, 1891, p. 76.  
= *Diplopodia hilli*.
12322. **Pseudomonotis (Eumicrotis) curta** (Hall). Plesiotypes.  
Jurassic. Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 354, pl. 3, figs. 24, 25.
35305. **Pseudomonotis equestriata** Beede. Plesiotypes.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 428, pl. 8, fig. 5.
35304. **Pseudomonotis kansasensis** Beede. Plesiotype.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 428, pl. 8, fig. 4.
12269. **Pseudomonotis (Eumicrotis) orbiculata** Whitfield Cctypes.  
Jurassic. Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 356, pl. 3, figs. 17-19.
6516. **Pseudomonotis radialis** (Phillips) ?? Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 201, pl. 9, fig. 3.



46281. **Psiloconcha elliptica** Ulrich. Cotypes.  
 Richmond (Ord.). Clarksville, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 667, pl. 52, figs. 3, 4; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 530, figs. 42c, d.
46283. **Psiloconcha grandis** Ulrich. Holotype.  
 Richmond (Ord.). Waynesville, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 665, pl. 52, figs. 1, 2; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 530, figs. 42a, b.
46284. **Psiloconcha inornata** Ulrich. Cotypes.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 667, pl. 52, figs. 11, 12.
46285. **Psiloconcha minima** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 669, pl. 52, figs. 8, 9.
46286. **Psiloconcha minnesotensis** Ulrich. Holotype.  
 Trenton (Ord.). Near Pleasant Grove, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 531, pl. 36, figs. 31, 32.
46288. **Psiloconcha sinuata** Ulrich. Cotypes.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 668, pl. 52, figs. 15, 16.
46290. **Psiloconcha subovalis** (Ulrich). Holotype and plesiotypes.  
 46291. Lorraine (Ord.). Morrow, Ohio.  
 Utica (Ord.). Near Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 666, pl. 52, figs. 5-7.  
 See *Orthodesma subovale*.
46289. **Psiloconcha subrecta** Ulrich. Holotype.  
 Richmond (Ord.). Waynesville, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 667, pl. 52, figs. 13, 14.
46292. **Psiloconcha tenuistriata** Ulrich. Holotype.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 668, pl. 52, fig. 10.
46287. **Psilonychia perangulata** Ulrich. Holotype.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 649, pl. 51, figs. 1-3.
114881. **Pteria (argentea var.?) chipolana** Dall. Holotype.  
 Oligocene. Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1894, p. 669.



8771. **Pteria (Oxytoma) erecta** White. Cotypes.  
Colorado (Cret.). Lower Potato Valley, Utah.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 157; *ibid.*, IV, 1881,  
p. 139, figs. 7, 8.  
= *Avicula gastrodes*.
12332. **Pteria (Pseudopteria) fibrosa** (Meek and Hayden). Plesiotype.  
Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 386, pl. 7, fig. 5.  
= *Avicula fibrosa*.
460. **Pteria (Pseudoptera) fibrosa** (Meek and Hayden). Holotype and paratypes.  
Fox Hills (Cret.). Forks of Cheyenne River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 36, pl. 17, figs.  
17c, 17d.  
= *Avicula?* *fibrosa*.
7789. **Pteria (Oxytoma?) gastrodes** Meek. Holotype.  
Colorado (Cret.). Coalville, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 280,  
pl. 10, fig. 1a.  
= *Avicula gastrodes*.
324. **Pteria linguiformis** (Evans and Shumard). Plesiotypes.  
Fort Pierre (Cret.). Fox Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 32, pl. 16, figs.  
1c, 1d.  
= *Avicula linguiformis*.
12337. **Pteria linguiformis** (Evans and Shumard). Plesiotypes.  
Fort Pierre (Cret.). South Fork of Cheyenne River, near  
French Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 384, pl. 7, figs. 2, 3.  
= *Avicula linguiformis*.
461. **Pteria linguiformis subgibbosa** (Meek). Holotype.  
Fox Hills (Cret.). Long Lake, North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 33, pl. 28, fig. 12.  
= *Avicula linguiformis subgibbosa*.
1893. **Pteria munsteri** (Bronn). Plesiotypes.  
Jurassic. Wind River Valley, Wyoming.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.,  
No. 172, XIV, 1864, p. 80, text figs. A, B.  
= *Avicula wyomingensis*.  
See *Avicula mucronata*.



43724. **Ptilodictya hilli** James. Plesiotype and figured sections.  
Lorraine (Ord.). Boyle County, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, pl. 7, figs. 7, 7a  
= *Escharopora hilli*.
43477. **Ptilodictya ? libana** Safford. Cotypes.  
Stones River (Ord.). Lebanon, Tennessee.  
Safford, Geol. Tenn., 1869, p. 286.
43726. **Ptilodictya maculata** Ulrich. Cotypes and figured sections.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 163, pl. 6,  
fig. 17, and pl. 7, figs. 4, 4a; Geol. Surv. Ill., VIII, 1890,  
p. 317, fig. 6b.  
= *Escharopora maculata*.
43420. **Ptilodictya magnifica** Ulrich. Figured section of plesiotype.  
Richmond (Ord.). Oxford, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 391, figs. 11a-c.
43725. **Ptilodictya pavonia** (D'Orbigny). Plesiotype and figured  
sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 163, pl. 7,  
figs. 3-3d.  
= *Escharopora pavonia*.
43274. **Ptilodictya perelegans** Ulrich. Holotype.  
Richmond (Ord.). Near Clarksville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 94, pl. 4,  
figs. 16, 16a.  
= *Graptodictya perelegans*.
43727. **Ptilodictya ramosa** Ulrich. Holotype.  
Stones River (Ord.). Lebanon, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 164, pl. 7,  
figs. 5-5a.  
= *Escharopora ramosa*.
43818. **Ptilodictya subrecta** Ulrich. Cotypes.  
Black River (Ord.). Minneapolis, Minn.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
1886, p. 63.  
= *Escharopora subrecta*.
8065. **Ptilodictya triangulata** White. Cotypes.  
Upper Carboniferous. Yampa Plateau, Colorado.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 214; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 131, pl. 83, fig.  
3, 3a.  
= *Prismopora triangulata*.



9447. **Ptilodictya triangulata** White. Plesiotypes.  
Upper Carboniferous. Cebolla and Coyote creeks, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl. 1881, p. 24, pl. 4, fig. E.  
= *Prismopora triangulata*.
43418. **Ptilodictya variabilis** Ulrich. Figured section of plesiotype.  
Richmond (Ord.). Blanchester, Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 304, fig. 2a; p. 319, fig. 6a.  
= *Ptilodictya nodosa*.
43476. **Ptilodictya whiteavesi** Ulrich. Figured section of cotype.  
Richmond (Ord.). Stony Mountain, Manitoba.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal. Cambro-Sil., Pt. II, 1889, p. 44, pl. 8, figs. 1-1e.
43786. **Ptilopora cylindracea** Ulrich. Cotypes.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 623, pl. 66, figs. 2, 2b.
43432. **Ptilopora paupera** Ulrich. Cotypes.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 624, pl. 66, fig. 10.
43787. **Ptilotrypa obliquata** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 531, pl. 30, figs. 1b, 1d, 1e.
24578. **Ptychaspis minuta** Whitfield? Plesiotype.  
Upper Cambrian. Lookout Mountain, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 60, pl. 10, fig. 23.
24579. **Ptychaspis pustulosa** Hall and Whitfield. Cotypes.  
Upper Cambrian. West side of Pogonip Mountain, White Pine District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 223, pl. 2, fig. 27.
21704. **Ptychites cummingsi** White. Cotype.  
Permian. Military Crossing of the Big Wichita, Baylor County, Texas.  
White, Amer. Nat., XXXIII, 1889, p. 117, pl. 1, figs. 4-8.  
= *Waagenoceras cummingsi*.
12324. **Ptychoceras crassum** Whitfield. Cotypes.  
Fort Pierre (Cret.). Old Woman Fork, Black Hills, Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 459, pl. 16, figs. 3, 4, 6.



21870. *Ptychoceras crassum* Whitfield. Plesiotypes  
Fort Pierre (Cret.). Near Boulder, Colorado.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 579, pl. 4  
figs. 18-21.
12279. *Ptychoceras meekianum* Whitfield. Cotypes  
Fort Pierre (Cret.). Beaver Creek, Black Hills, South  
Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880  
p. 457, pl. 16, fig. 1.
21092. *Ptychoceras texanum* Shumard. Plesiotypes  
Navarro (Cret.). Chatfield, Navarro County, Texas.  
Hyatt, Proc. Amer. Philos. Soc., XXXII, 1894, p. 580.
43123. *Ptychocladia agellus* Ulrich and Bassler. Holotype  
Upper Coal Measures. Near Springfield, Illinois.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, p.  
290, pl. 67, fig. 10, pt. 13.
40774. *Ptychocrinus parvus* (Hall). Plesiotype  
Lorraine (Ord.). Cincinnati, Ohio.  
Wachsmuth and Springer, N. A. Crinoidea Camerata, Mem. Mus.  
Comp. Zool., XXI, 1897, p. 199, pl. 18, fig. 2.  
See *Reteocrinus gracilis*.
30231. *Ptychomya ragsdalei* (Cragin). Plesiotype  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 24, pl. 12.
15435. *Ptychoparia adamsi* (Billings). Plesiotype  
Lower Cambrian. Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 195, pl. 26, figs.  
1-1b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 649, p.  
96, figs. 1-1b.
24642. *Ptychoparia* (*Euloma*?) *affinis* Walcott. Cotype  
Upper Cambrian. East of Hamburg Mine, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 54, pl. 10, fig. 12.  
ibid., XXXII, Pt. II, 1899, p. 457, pl. 65, fig. 8.
24571. *Ptychoparia*? *annectans* Walcott. Cotype  
Lower Pogonip (Upper Cambrian). Ridge east of Ham-  
burg Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 91, pl. 12, fig. 11.
35234. *Ptychoparia antiquata* (Salter). Plesiotype  
Flathead (Middle Cambrian). Yellowstone National Park  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 456, p.  
65, figs. 7, 7a.



24656. **Ptychoparia anytus** Hall and Whitfield. Plesiotype.  
Upper Cambrian. New York and Secret Canyons, Eureka District.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 56, pl. 9, fig. 26.  
See *Crepicephalus* (*Loganellus*) *anytus*.
18332. **Ptychoparia ? attleborensis** Shaler and Foerste. Plesiotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 649, pl. 95, fig. 2.
24577. **Ptychoparia (Solenopleura ?) breviceps** Walcott. Holotype.  
Upper Cambrian. North of Adams Hill, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 49, pl. 10, fig. 9.
23854. **Ptychoparia burnetensis** Walcott. Cotypes.  
Upper Cambrian. Tatur Hill, Burnet County, Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 272, pl. 21, fig. 1.
17454. **Ptychoparia ? (subgenus ?) clavata** Walcott. Holotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 198, pl. 1, fig. 3.  
= *Protypus ? clavatus*.
23855. **Ptychoparia connata** Walcott. Holotype.  
Upper Cambrian. Eau Claire, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 272, pl. 21, fig. 2.
35227. **Ptychoparia (?) diademata** (Hall). Plesiotypes.  
Middle Cambrian. Soda Butte Creek, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 462, pl. 64, figs. 2, 2a, 2b.
35228. **Ptychoparia (?) diademata** (Hall). Plesiotype.  
St. Croix (Middle Cambrian). Near Hudson, Saint Croix County, Wisconsin.  
Walcott Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 462, pl. 64, fig. 2c.
24615. **Ptychoparia (Euloma ?) dissimilis** Walcott. Cotype.  
Middle Cambrian. New York Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 51, pl. 9, fig. 28.
17455. **Ptychoparia ? fitchi** Walcott. Cotype.  
Lower Cambrian. Near North Granville, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 197, pl. 1, fig. 6;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 650, pl. 96, fig. 5.



15443. *Ptychoparia housensis* Walcott. Holotype.  
Middle Cambrian. House Range, Antelope Springs, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 201, pl. 25, fig. 5.
24614. *Ptychoparia læviceps* Walcott. Cotype.  
Middle Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 54, pl. 10, figs. 17, 18.
24611. *Ptychoparia* (?) *linnarssoni* Walcott. Cotype.  
Middle Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 47, pl. 9, figs. 18, 18a.
23857. *Ptychoparia llanoensis* Walcott. Cotypes.  
Upper Cambrian. Packsaddle Mountain, Llano County, Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 272, pl. 21, figs. 3, 4, 5; Mon. XXXII, U. S. Geol. Surv., Pt. II, 1899, p. 45, pl. 64, fig. 4.
24613. *Ptychoparia* (*Pterocephalus*) *occidens* Walcott. Holotype.  
Upper Cambrian. East of Hamburg Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 58, pl. 9, fig. 2.
24612. *Ptychoparia occidentalis* Walcott. Cotype.  
Middle Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 51, pl. 10, fig. 5.
24610. *Ptychoparia oweni* Meek and Hayden. Plesiotype.  
Middle Cambrian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 55, pl. 10, figs. 3, 3a.  
See *Agraulos oweni*, *Arionellus* (*Crepicephalus*) *oweni* and *Conocoryphe* (*Ptychoparia*) *gallatinensis*.
35231. *Ptychoparia penfieldi* Walcott. Cotypes.  
Flathead (Middle Cambrian). Crowfoot section, Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 47, pl. 65, figs. 4, 4a, 4b.
24608. *Ptychoparia* (?) *pernasutus* Walcott. Cotype.  
Upper Cambrian. East of Hamburg Ridge, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 49, pl. 10, figs. 8-8b.  
= *Anomocare pernasutus*.
23859. *Ptychoparia pero* Walcott. Cotype.  
Upper Cambrian. Morgans Creek, Burnet County, Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 274, pl. 21, fig. 1.



15434. **Ptychoparia piochensis** Walcott. Cotype.  
Middle Cambrian. Near Pioche, Nevada.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 201, pl. 26, figs. 2-2b; pl. 28, figs. 1-1e.
15441. **Ptychoparia? prospectensis** Walcott. Holotype.  
Lower Cambrian. Prospect Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 46, pl. 9, fig. 20;  
Bull. No. 30, U. S. Geol. Surv., 1886, p. 202, pl. 27, fig. 5.
15432. **Ptychoparia quadrans** (Hall and Whitfield). Cotypes.  
Middle Cambrian. Box Elder Canyon, Wahsatch Mountains, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 199, pl. 29, figs. 4-4b.  
See *Crepicephalus?* (*Loganellus*) *quadrans*.
24641. **Ptychoparia similis** Walcott. Cotype.  
Upper Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 52, pl. 10, fig. 10.
24609. **Ptychoparia similis robustus** Walcott. Holotype.  
Upper Cambrian. Secret Canyon, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 53, pl. 1, figs. 9, 9a.
23860. **Ptychoparia suada** Walcott. Holotype.  
Upper Cambrian. Morgans Creek, Burnett County, Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 274, pl. 21, fig. 9.
15442. **Ptychoparia subcoronata** (Hall and Whitfield). Cotypes.  
Lower Cambrian. Ute Peak, Wahsatch Range, Utah.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 205, pl. 28, fig. 4;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 652, pl. 96, fig. 6.  
See *Conocephalites subcoronatus*.
15436. **Ptychoparia teucer** (Billings). Plesiotype.  
Lower Cambrian. Near Highgate Springs, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 197, pl. 26, fig. 3;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 652, pl. 96, fig. 3.
23861. **Ptychoparia? urania** Walcott. Cotypes.  
Upper Cambrian. Packsaddle Mountain, Llano County, Texas.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 274, pl. 21, figs. 10, 11.
15437. **Ptychoparia vulcanus** (Billings). Plesiotype.  
Lower Cambrian. Georgia, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 198, pl. 26, fig. 4;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 653, pl. 96, fig. 4.



35225. **Ptychoparia (Lonchocephalus) wisconsensis** (Owen). Plesiotypes.  
Middle Cambrian. Soda Butte Creek, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 461, pl. 64, figs. 1, 1a.
35226. **Ptychoparia (Lonchocephalus) wisconsensis** (Owen). Plesiotypes.  
St. Croix (Middle Cambrian). Four miles southeast of Lake City, Minnesota.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 461, pl. 64, figs. 1b, 1c.
14575. **Ptychophyllum? infundibulum** Meek. Cotypes.  
Upper Devonian. Treasure Hill, White Pine District, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 23, pl. 2, figs. 1-1b.
14366. **Ptychopteria protoforme** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 235, pl. 8, fig. 3.
124930. **Ptychosalpinx (Buccinum) tuomeyi** Lea. Cotypes.  
124931. Miocene. James River, Virginia.  
Lea, Trans. Amer. Philos. Soc. (2), IX, 1845, p. 271, pl. 3, fig. 97.—Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 237.
35331. **Pugnax utah** (Marcou). Plesiotype.  
Maroon (Upper Carb.). Southeast of Italian Peak, Elk Mountain, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, pl. 7, figs. 14-14b.
22918. **Pugnellus fusiformis** (Meek). Plesiotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 148, pl. 3, figs. 7-11.  
See *Anchura? fusiformis* and *Lispodesthes? obscurata*.
9003. **Pupa arenula** White. Holotype.  
Green River (Eocene). Henrys Fork, near Green River City, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 46, pl. 19, figs. 8a, 8b; Third Ann. Rept. U. S. Geol. Surv. 1883, p. 456, pl. 29, fig. 19.
9002. **Pupa atavuncula** White. Holotype.  
Green River (Eocene). Henrys Fork, near Green River City, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 46, pl. 19, fig. 9a; Third Ann. Rept. U. S. Geol. Surv. 1883, p. 456, pl. 29, fig. 18.



9004. **Pupa incolata** White. Holotype.  
Eocene. Henrys Fork, Wyoming.

White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 456, pl. 29,  
figs. 15-17.

9004. **Pupa (Leucocheila) incolata** White. Holotype.  
Upper Green River (Eocene). Henrys Fork, near Green  
River City, Wyoming.

White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 47, pl. 19, figs. 7a-c.

20074. **Pupa leidyi** Meek? Plesiotypes.  
Eocene. Nacimiento, New Mexico.

White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 27, pl. 5, figs.  
8-10.

115493. **Purpura miocenica** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.

Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 410, pl. 16, fig. 9.

136023. **Pyramidella (Sulcorinella) dodona** Dall and Bartsch. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.

Dall and Bartsch, Proc. Biol. Soc. Washington, XVII, 1904, p. 14.

107118. **Pyramidella (Longchæus) forulata** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.

Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 315, pl. 28, fig. 13.

115642. **Pyramidella (Longchæus) jamaicensis** Dall. Holotype.  
Oligocene. Jamaica, West Indies.

Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 315, pl. 29, fig. 10.

113681. **Pyrazisinus? haitensis** Dall. Holotype.  
Oligocene. Island in Lake Henriquillo, Santo Domingo,  
West Indies.

Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 319, pl. 29, fig. 8.

112530. **Pyrazus (Pyrazisinus) campanulatus** Heilprin. Plesiotype.  
Oligocene. Tampa, Florida.

Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, pl. 11,  
figs. 10, 10a; Pt. II, 1892, p. 288, pl. 15, figs. 2, 6, 10.

46296. **Pyrenomæus decipiens** Ulrich. Cotypes.  
Lorraine (Ord.). Cincinnati, Ohio.

Ulrich, Geol. Surv. Ohio, VII, 1893, p. 681, pl. 51, figs. 7, 8.

46297. **Pyrenomæus subcuneatus** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.

Ulrich, Geol. Surv. Ohio, VII, 1893, p. 682, pl. 51, fig. 6.



498. *Pyrgulifera humerosa* Meek. Cotypes.  
Bear River (Cret.). Bear River, near mouth of Sulphur  
Creek, Wyoming.

Meek, Rept. Expl. Great Basin, of Utah, Simpson, 1876, p. 363,  
pl. 5, figs. 6a-c.

See *Melania humerosa*.

12470. *Pyrgulifera humerosa* Meek. Plesiotypes.  
12499. Bear River (Cret.). Bear River, Wyoming.

White, Proc. U. S. Nat. Mus., V, 1882, p. 98, pl. 3, figs. 10-12.—  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p.  
176, pl. 17, fig. 19; text fig. 6 on p. 177.—White, Third Ann.  
Rept. U. S. Geol. Surv., 1883, p. 460, pl. 6, figs. 4, 5.

See *Melania humerosa*.

498. *Pyrgulifera humerosa* (Meek). Cotypes and plesiotypes.  
12471. Bear River (Cret.). Sulphur Creek, near Evanston, and  
22332. Cokeville, Wyoming.

23105. White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 55, pl. 8, figs.  
23106. 1-11; pl. 9, figs. 4-8.

23128. *Pyrgulifera meekii* White. Plastotype.  
Cretaceous. Five miles west of north of Fairburg, Ne-  
braska.

White, Proc. U. S. Nat. Mus., XVII, 1894, p. 135, pl. 8, fig. 13.

23107. *Pyrgulifera stantoni* White. Cotype.  
Bear River (Cret.). Cokeville, Wyoming.

White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 57, pl. 9, figs.  
1-3.

253. *Pyrifusus* (*Neptunella*) *intertextus* (Meek and Hayden).  
Holotype.  
Fort Pierre (Cret.). Yellowstone River, near Miles City,  
Montana.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 348, pl. 19,  
figs. 14a, 14b.

See *Fusus intertextus*.

257. *Pyrifusus* (*Neptunella*) *newberryi* (Meek and Hayden).  
257a. Holotype and paratypes.  
Fort Pierre (Cret.). Moreau River, South Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 346, text fig. 39,  
pl. 31, fig. 6a-f.

See *Fusus newberryi*.

254. *Pyrifusus* (*Neptunella*) *subturritus* (Meek and Hayden).  
Holotype.

Fort Pierre (Cret.). Grand River, South Dakota.

Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 347, text fig. 40,  
pl. 32, figs. 3a, 3b.

See *Fusus subturritus*.



9854. *Pyrina parryi* Hall. Holotype.  
Washita (Lower Cret.). Leon Springs, El Paso Road,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 144, pl. 1, figs. 1a-d.—Clark, Bull. No. 97, U. S. Geol.  
Surv., 1893, p. 59, pl. 24, figs. 1a-k.
252. *Pyropsis bairdi* (Meek and Hayden). Holotype and  
paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 369, pl. 31,  
figs. 10a, 10b.  
See *Pyrula bairdi*.
252. *Pyropsis bairdi rotula* Meek. Cotypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 371, text fig. 47.
22924. *Pyropsis coloradoensis* Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 154, pl. 32,  
figs. 6-8.
252. *Pyrula bairdi* Meek and Hayden. Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 66.  
= *Pyropsis bairdi*.
35400. *Rafinesquina alternata ponderosa* Hayes and Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, fig. 20.
107034. *Rangia johnsoni* (Dall). Holotype.  
Miocene. Near Vernal, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 905, pl. 22, fig. 18.  
See *Gnathodon johnsoni*.
111586. *Rangia (Perissodon) minor* (Conrad) ? Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 84, pl. 15,  
figs. 4-6.  
= *Mulinia minor*.
15405. *Ranina porifera* Woodward. Holotype.  
Eocene. San Fernando, Trinidad, British West Indies.  
Woodward, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 591  
pl. 26, fig. 18.



112520. **Rapana tampaensis** Dall. . . . . **Cotypes.**  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 153;  
ibid., Pt. II, 1892, p. 244, pl. 20, fig. 14.
17309. **Raphistoma acuta** Hall and Whitfield. . . . . **Cotypes.**  
Pogonip? (Ord.). Ute Peak, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 235, pl. 1, figs. 20-22.
17312. **Raphistoma nasoni** (Hall). . . . . **Plesiotypes.**  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 78, pl. 11, figs. 21,  
21a.  
= *Eotomaria supracingulata*.
45975. **Raphistoma peracuta** Ulrich and Scofield. . . . . **Cotypes.**  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 940, pl. 68, figs. 1-6.
45976. **Raphistoma richmondense** Ulrich. . . . . **Holotype.**  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 941, pl. 68, figs. 7-9.
17316. **Raphistoma? rotuliformis** (Meek). . . . . **Cotypes.**  
Lower Pogonip (Ord.?). Ute Peak, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 18,  
pl. 1, figs. 2-2b.
17315. **Raphistoma? trochiscus** (Meek). . . . . **Cotypes.**  
Upper Pogonip (Ord.). Ute Peak, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 19,  
pl. 1, figs. 3-3b.—White, Rept. U. S. Geogr. Surv. W. 100  
Merid., IV, Pt. I, 1877, p. 77, pl. 4, figs. 13a-13c.
45977. **Raphistomina denticulata** Ulrich. . . . . **Cotypes.**  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 943, pl. 68, figs. 21-23.
45978. **Raphistomina lapicida** (Salter). . . . . **Plesiotype.**  
Black River (Ord.). Near Lebanon, Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 942, pl. 68, figs. 18-20.
46071. **Raphistomina modesta** Ulrich. . . . . **Holotype.**  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 943, pl. 68, figs. 14-17.
45979. **Raphistomina rugata** Ulrich and Scofield. . . . . **Holotype.**  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 944, pl. 68, figs. 10-13.



46567. **Rauffella filosa** Ulrich. Cotypes.  
 46568. Black River (Ord.). St. Paul and Minneapolis, Minnesota.  
 Ulrich, Amer. Geol., III, 1889, p. 236, figs. 1, 2, 4; p. 237—Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 75, pl. F, figs. 16-18.
46569. **Rauffella palmipes** Ulrich. Cotypes.  
 Black River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Amer. Geol., III, 1889, p. 236, fig. 3; p. 238.—Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1893, p. 76, pl. F, figs. 19, 20.
24548. **Receptaculites ellipticus** Walcott. Holotype.  
 Upper Pogonip (Ord.). White Mountain, Goodwin Canyon, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 67, pl. 11, fig. 12.
24635. **Receptaculites elongatus** Walcott. Cotypes.  
 Upper Pogonip (Ord.). White Pine District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 66.
24636. **Receptaculites mammillaris** (Newberry ms.) Walcott. Cotypes.  
 Upper Pogonip (Ord.). White Pine District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 65, pl. 11, fig. 11.
5894. **Rensselæria lævis** Meek. Cotypes.  
 5895. Base of Upper Devonian. Onion River and forty miles below Good Hope, Mackenzie River, Canada.  
 Meek, Trans. Chicago Acad. Sci., I, 1868, p. 108, pl. 13, figs. 8a-e; pl. 14, fig. 4.  
 = *Newberria lævis*.
12363. **Requienia patagiata** White. Cotypes.  
 Edwards (Cret.). Near Austin, Texas.  
 White, Bull. No. 4, U. S. Geol. Surv., 1884, p. 6, pl. 1, figs. 1-8; pl. 2, figs. 1-4.
40774. **Reteocrinus gracilis** Wetherby. Holotype.  
 Lorraine (Ord.). Cincinnati, Ohio.  
 Wetherby, Journ. Cincinnati Soc. Nat. Hist., IV, 1881, p. 83, pl. 2, figs. 2, 2a.  
 = *Ptychocrinus parvus*.
40757. **Reteocrinus magnificus** Miller. Plesiotype.  
 Richmond (Ord.). Near Waynesville, Ohio.  
 Wachsmuth and Springer, N. A. Crinoidea Camerata, Mem. Mus. Comp. Zool., XXI, 1897, p. 181, pl. 9, fig. 2.
40756. **Reteocrinus nealli** (Hall). Plesiotype.  
 Richmond (Ord.). Clinton County, Ohio.  
 Wachsmuth and Springer, N. A. Crinoidea Camerata, Mem. Mus. Comp. Zool., XXI, 1897, p. 179, pl. 9, fig. 1a.  
 See *Glyptocrinus nealli*.



17939. **Retepora archimedes** Owen. Holotype  
Warsaw (Miss.). Keokuk Rapids, Mississippi River  
Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa and Minn., 1852, pl. 4, fig.  
= *Archimedes wortheni*.
43434. **Reteporella cinctata** (Hall). Plesiotype 22  
figured section  
Hamilton (Dev.). Thedford, Ontario, Canada.  
Ulrich, Geol. Surv. Ill., VIII, 1890, pl. 55, fig. 10 (as *Phyllopora*  
sp. indet.).
35188. **Reticularia cooperensis** (Swallow). Plesiotype  
Madison (Miss.). Crowfoot Ridge, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 555,  
70, figs. 9a, 9b, 9c.
35187. **Reticularia cooperensis** (Swallow) var. Plesiotype  
Madison (Miss.). Eureka District, Nevada.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 555,  
70, figs. 6a, 6b, 6c.
8537. **Reticularia ? peculiaris** (Shumard). Plesiotype  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 555,  
70, figs. 8a, b.  
See *Spirifer (Martinia) peculiaris*.
35245. **Reticularia perplexa** (McChesney). Plesiotype  
Upper Coal Meas. Krebs, Indian Territory.  
Girty, 19th Ann. Rept. U. S. Geol. Surv., 1900, p. 577, pl.  
fig. 1a.
35189. **Reticularia (?) subrotundata** (Hall). Plesiotype  
Madison (Miss.). Five miles above Monarch, on Elk  
Creek, Montana.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 555,  
70, figs. 7a, 7b.
113879. **Retusa chipolana** Dall. Cotype  
Chipola (Oligocene). Chattahoochee River, and  
Grove, Yellow River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 28; Trans. W.  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 9.
113886. **Retusa (Cylichnina) decapitata** Dall. Cotype  
Oligocene. Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 30; Trans. W.  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 20.



113876. **Retusa (Cylichnina) duplinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 31; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 20.
131528. **Retusa (Cylichnina) guercinensis** Dall. Holotype.  
Alum Bluff (Oligocene). Oak Grove, Santa Rosa County,  
Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 31; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 17.
113887. **Retusa (Cylichnina) microtrema** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 31; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 25.
8511. **Retzia mormonii** (Marcou). Plesiotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th. Merid., IV, Pt. I,  
1876, p. 141, pl. 10, figs. 7a-7c.  
= *Hustedia mormoni*.
6817. **Retzia punctulifera** Shumard. Plesiotypes.  
Upper Carboniferous. Rock Bluff, Missouri River,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p.  
181, pl. 1, fig. 13; pl. 5, fig. 8.  
= *Hustedia mormoni*.
8227. **Retzia woosteri** White. Plastotype.  
Upper Carboniferous? Eighteen miles north of Greeley,  
Colorado.  
White, Bull. No. 5, U. S. Geol. Surv. Terr., 1879, p. 215; Twelfth  
Ann. Rept. U. S. Geol. Surv. Terr., 1880, p. 134, pl. 34, figs.  
8a, 8b.—Girty, Prof. Paper No. 16, U. S. Geol. Surv., 1903,  
p. 302, pl. 1, figs. 11, 11a.
40772. **Rhaphanocrinus sculptus** Miller. Plesiotype.  
Richmond (Ord.). Waynesville, Ohio.  
Wachsmuth and Springer, N. A. Crinoidea Camerata., Mem. Mus.  
Comp. Zoöl., XXI, 1897, p. 260, pl. 11, fig. 3.  
See *Glyptocrinus sculptus*.
158401. **Rhectopsammia claibornensis** Vaughan. Cotypes.  
158402. Claibornian (Eocene). Claiborne and Jackson, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 184, pl. 21,  
figs. 11, 12.
43708. **Rhinidictya exigua** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 131, pl. 8, figs. 6-10; Journ. Cincinnati Soc. Nat. Hist.,  
XII, 1890, p. 184, figs. 9, 9a-d.



43603. *Rhinidictya fidelis* Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 134, pl. 6, figs. 7, 7a, 7b, 8.
43606. *Rhinidictya grandis* Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 136, pl. 5, figs. 11, 12; pl. 6, figs. 19, 20.
43702. *Rhinidictya humilis* Ulrich. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 185, figs.  
10, 10a-b.  
= *Pachydictya pumila*.
43709. *Rhinidictya minima* Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 183, figs.  
8, 8a-c; Geol. and Nat. Hist. Surv. Minn., Final Rept., III,  
Pt. I, 1893, p. 132, pl. 5, figs. 13-15, 18.
43610. *Rhinidictya minima modesta* Ulrich. Cotypes and figured  
sections.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 133, pl. 5, fig. 17.
43812. *Rhinidictya mutabilis* (Ulrich). Cotypes and figured  
sections.  
Black River (Ord.). Minneapolis and St. Paul, Minne-  
sota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 125, pl. 6, figs. 1, 4, 5, 6, 12, 13; pl. 7, figs. 10-15,  
25-28; pl. 8, figs. 1-3.  
See *Stictopora mutabilis*.
43813. *Rhinidictya mutabilis major* (Ulrich). Cotypes.  
Black River (Ord.). St. Paul and Minneapolis, Minne-  
sota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 127.  
See *Stictopora mutabilis major*.
43814. *Rhinidictya mutabilis senilis* Ulrich. Cotype and  
figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 127, pl. 6, figs. 2, 3; pl. 7, figs. 16, 17.
43608. *Rhinidictya neglecta* Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 130, pl. 5, figs. 22-25.



43609. **Rhinidictya neglecta canadensis** Ulrich. Holotype.  
Trenton (Ord.). Ottawa, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 130.
43706. **Rhinidictya nicholsoni** Ulrich. Cotypes and figured sections.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 170, pl. 8, figs. 6, 6a, 6b.
43602. **Rhinidictya paupera** Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 129, pl. 5, figs. 19-21.
43605. **Rhinidictya pediculata** Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 137, pl. 7, figs. 1-5.
43607. **Rhinidictya trentonensis** (Ulrich). Plesiotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 135, pl. 6, figs. 14-18; pl. 7, figs. 6-9.  
See *Dicranopora trentonensis*.
34117. **Rhipidomella oblata** (Hall). Plesiotype.  
Helderbergian (Lower Dev.). Atoka quadrangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 562, pl. 70, fig. 3a.
27769. **Rhipidomella oblata emarginata** (Hall). Plesiotypes.  
34118. Helderbergian (Lower Dev.). Atoka quadrangle, Indian Territory, and Big Sandy River, Benton County, Tennessee.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 562, pl. 70, figs. 2a-2j.
26096. **Rhizostomites admirandus** Haeckel. Plastotype.  
Jurassic. Solenhofen, Germany.  
Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 76, pl. 42, fig. 2.
26103. **Rhizostomites lithographicus** Haeckel. Plesiotype.  
Jurassic. Eichstätt, Germany.  
Walcott, Mon. XXX, U. S. Geol. Surv., 1898, p. 83, pl. 41, fig. 1.
8032. **Rhodocrinus vesperalis** White. Holotype.  
Sevier (Ord.). Knoxville, Tennessee.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 129, pl. 35, figs. 4a, 4b.  
[Described as from Upper Carboniferous, but is from the Ordovician.]  
= *Diabolocrinus vesperalis*.



44106. **Rhombopora angustata** Ulrich. Cotypes.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 652, pl. 70, figs. 6, 6a.
43713. **Rhombopora armata** Ulrich. Holotype.  
Kaskaskia (Miss.). Tateville (Sloans Valley), Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 31, pl. 1, figs. 5, 5a.
43346. **Rhombopora ? asperula** Ulrich. Cotypes and figured  
43347. sections.  
Keokuk (Miss.). Nauvoo, Illinois; Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 656, pl. 70, figs. 9-9e.
43344. **Rhombopora attenuata** Ulrich. Cotypes.  
Keokuk (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 655, pl. 70, fig. 7.
43714. **Rhombopora crassa** Ulrich. Holotype and figured sections.  
Upper Coal Measures. Kansas City, Missouri.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 28, pl. 1, figs. 2-2b.
44104. **Rhombopora decipiens** Ulrich. Cotype and figured sections.  
St. Louis (Miss.). Monroe County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 657, pl. 71, figs. 3b-3d.
43716. **Rhombopora elegantula** Ulrich. Cotypes and figured  
sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 33, pl. 1, figs. 3-3b.
44103. **Rhombopora gracilis** Ulrich. Cotypes.  
Burlington (Miss.). Burlington, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 651, pl. 70, figs. 11a, 11b.
43345. **Rhombopora incrassata** Ulrich. Cotypes and figured  
sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 652, pl. 70, figs. 12-12d.
43715. **Rhombopora lepidodendroidea** Meek. Plesiotypes and  
figured sections.  
Upper Coal Measures. Kansas City, Missouri.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 27, pl. 1, figs. 1-1b.
24532. **Rhombopora lepidodendroides** Meek. Cotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 141, pl. 7, figs. 2a-2c, 2f, 2g.



43343. **Rhombopora lineinodis** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 649, pl. 45, figs. 3-3b.
43342. **Rhombopora lineinodis humilis** Ulrich. Cotypes.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 650, pl. 45, figs. 4, 4a.
43336. **Rhombopora minor** Ulrich. Cotypes.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 659, pl. 70, figs. 4, 4a.
43338. **Rhombopora nicklesi** Ulrich. Cotypes.  
Lower Coal Measures. Sparta, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 661, pl. 70, figs. 1-1c.
43480. **Rhombopora ohioensis** Ulrich. Cotypes.  
Upper Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 90, pl. 14, figs. 15, 15a.
43712. **Rhombopora persimilis** Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 30, pl. 1, figs. 7a, 7b.
43340. **Rhombopora persimilis** Ulrich? Plesiotype.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 659, pl. 70, fig. 3.
43711. **Rhombopora pulchella** Ulrich. Holotype.  
Kaskaskia (Miss.). Tateville (Sloans Valley), Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 31, pl. 1, figs. 6, 6a.
44105. **Rhombopora simulatrix** Ulrich. Cotypes and figured sections.  
St. Louis (Miss.). Columbia, Monroe County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 657, pl. 71, figs. 2-2b, 2d, 2e.
43337. **Rhombopora ? spiralis** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 656, pl. 71, figs. 5-5d.  
= *Streblotrypa spiralis*.
44102. **Rhombopora subannulata** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 648, pl. 45, figs. 1-1i.
43341. **Rhombopora sulcifera** Ulrich. Cotypes and figured sections.  
Middle Devonian. Davenport, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 649, pl. 45, figs. 2, 2b.



43793. **Rhombopora tabulata** Ulrich. Cotype and figured sections.  
Chester (Miss.). Kaskaskia, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 658, pl. 70, figs. 2a-2c.
43339. **Rhombopora tenuirama** Ulrich. Cotypes.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 660, pl. 70, figs. 8-8b.
43717. **Rhombopora wortheni** Ulrich. Cotype and figured section.  
Chester (Miss.). Somerset, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VII, 1884, p. 32, pl. 1, figs. 4, 4a, 4b.
43116. **Rhopalonaria attenuata** Ulrich and Bassler. Cotypes.  
Rochester (Sil.). Lockport, New York.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 268, pl. 66, figs. 4, 5.
43122. **Rhopalonaria keokukensis** Ulrich and Bassler. Holotype.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 272, pl. 66, fig. 11.
43120. **Rhopalonaria medialis** Ulrich and Bassler. Holotype.  
Hamilton (Dev.). Thedford, Ontario, Canada.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 270, pl. 66, fig. 10.
43259. **Rhopalonaria pertenuis** Ulrich. Holotype.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1886, p. 59.  
=Stomatopora delicatula.
35089. **Rhopalonaria robusta** Ulrich and Bassler. Holotype.  
Camden (Lower Dev.). Camden, Tennessee.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 269, pl. 66, fig. 6.
43118. **Rhopalonaria tenuis** Ulrich and Bassler. Holotype and  
43119. paratypes.  
Hamilton (Dev.). Thedford, Ontario, Canada; Alpena, Michigan.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 270, pl. 66, figs. 7-9.
43113. **Rhopalonaria venosa** Ulrich. Holotype and plesiotype.  
43115. Richmond (Ord.). Waynesville and Clarksville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 26, pl. 7, figs. 24, 24a.—Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLV, 1904, p. 268, pl. 66, figs. 2, 3.

**Rhynchonella** sp. undet. Meek and Hayden = **Rhynchonella gnathophora**.



8549. *Rhynchonella argenturbica* White. Cotypes.  
 Richmond (Ord.). Silver City, New Mexico.  
 White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
 1874, p. 14; Rept. U. S. Geogr. Surv. W. 100th Merid., IV  
 Pt. I, 1877, p. 75, pl. 4, figs. 12a-12e.  
 — *Rhynchotrema mæquivalvis*.
4816. *Rhynchonella barrandei* Hall. Plastotype  
 Oriskany (Lower Dev.). Albany County, New York.  
 Hall, Nat. Hist. New York, Pal. III, 1859, p. 442, pl. 103, fig. 4.
5890. *Rhynchonella castanea* Meek. Cotypes.  
 Base of Upper Devonian. Lockhart River, Mackenzie  
 River Basin, Canada.  
 Meek, Trans. Chicago Acad. Sci., 1, 1868, p. 93, pl. 13, figs. 9a-c.  
 — *Hypothyris castanea*.
13854. *Rhynchonella castanea* Meek. Plesiotype.  
 Upper Devonian. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 153, pl. 15, figs.  
 1, 1a, 4, 4a.  
 = *Hypothyris castanea*.
13851. *Rhynchonella duplicata* (Hall). Plesiotype.  
 Upper Devonian. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 155, pl. 14, fig. 8.  
*Camartæchia duplicata*.
14023. *Rhynchonella emmonsii* Hall and Whitfield. Cotypes.  
 Upper Devonian. Treasure Hill, White Pine District,  
 Nevada.  
 Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
 1877, p. 247, pl. 3, figs. 4-8.  
 = *Hypothyris emmonsii*.
7798. *Rhynchonella endlichi* Meek. Cotypes.  
 1444<sup>c</sup> Upper Devonian. East of Animas River, Colorado.  
 Meek, Bull. No. 1, U. S. Geol. Surv., Terr. 1875, p. 46.—White,  
 Twelfth Ann. Rept. U. S. Geol. Surv., Terr., 1880, p. 133, pl.  
 33, figs. 4a-4b; pl. 36, figs. 2a, 2b.  
 — *Camartæchia* ( *Plethorhyncha* ) *endlichi*.
14343. *Rhynchonella eurekensis* Walcott. Cotype.  
 Lower Carboniferous. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 223, pl. 18, figs.  
 8-8c.
319. *Rhynchonella gnathophora* Meek? Plesiotypes.  
 12550. Jurassic. Flaming Gorge. Uinta Range, Utah.  
 Meek and Hayden, Pal. Upp. Missouri, Smithsonian Contr. to  
 Knowl., No. 172, XIV, 1864, p. 71, pl. 3, fig. 4 (as *Rhyn-*  
*chonella* sp. undet.).—Hall and Whitfield, Rept. U. S. Geol.  
 Expl. 40th Par., IV, Pt. II, 1877, p. 284, pl. 7, fig. 6.



8853. *Rhynchonella gnathophora* Meek. Plesiotypes.  
 28954. Jurassic. Northwestern Colorado and Yellowstone  
 National Park.  
 Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 64  
 pl. 72, figs. 1-4.
109298. *Rhynchonella holmesii* Dall. Cotypes.  
 Eocene. City quarry, Wilmington, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
 1536, pl. 58, figs. 10, 11, 12.
13852. *Rhynchonella horsfordi* Hall. Plesiotypes.  
 Middle Devonian. Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 152, pl. 14, fig. 3  
 pl. 15, fig. 6.  
 = *Camarotoechia horsfordi*.
34634. *Rhynchonella* (?) *litchfieldensis* Schuchert. Holotype.  
 Cobleskill (Sil.). Wheelock's farm, Litchfield, Herkimer  
 County, New York.  
 Schuchert, Amer. Geol., XXXI, 1903, p. 167, text-figures.
8516. *Rhynchonella metallica* White. Cotypes.  
 Upper Carboniferous. Old Potosi mine, Lincoln County,  
 Nevada.  
 White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vol.  
 1874, p. 20; Rept. U. S. Geogr. Surv. W. 100th Merid., N.  
 Pt. I, 1877, p. 129, pl. 10, figs. 10a-10d.  
 = *Rhynchonella* (*Uncinulus*?) *metallica*.
20131. *Rhynchonella myrina* Hall and Whitfield. Cotype.  
 Jurassic. Flaming Gorge, Uinta Range, Utah.  
 Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pl. II  
 1877, p. 284, pl. 7, figs. 1-5.
12280. *Rhynchonella myrina* Hall and Whitfield. Plesiotypes.  
 12306. Jurassic. Red Canyon Creek, Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1887,  
 p. 347, pl. 3, figs. 6, 7.
13853. *Rhynchonella* (*Leiorhynchus*) *nevadensis* Walcott. Cotype.  
 Upper Devonian. Rescue Hill, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 157, pl. 14, figs.  
 9-9b.  
 = *Liorhynchus nevadense*.
13855. *Rhynchonella* ? *occidens* Walcott. Cotype.  
 Middle Devonian. Combs Peak, Eureka District, Nevada.  
 Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 152, pl. 15, figs.  
 3-3b.



6625. **Rhynchonella osagensis** (Swallow). Plesiotypes.  
Upper Carboniferous. Rock Bluff, Missouri River, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 179, pl. 1, figs. 9a-b.  
= *Pugnax utah*.
9301. **Rhynchonella ottumwa** White. Plesiotypes.  
St. Louis (Miss.). Ottumwa, Iowa.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 165, pl. 41, figs. 5a-c.  
= *Pugnax ottumwa*.
13857. **Rhynchonella pugnus** Martin. Plesiotype.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 155, pl. 14, figs. 7, 7a.  
= *Pugnax pugnus*.
14235. **Rhynchonella pustulosa** White? Plesiotype.  
Waverly (Miss.). Logan Canyon, Wahsatch Range, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 257, pl. 4, figs. 12-14.  
= *Rhynchopora pustulosa*.
8479. **Rhynchonella rockymontana** (Marcou). Plesiotype.  
Upper Carboniferous. Near Beckwith Spring, Cedar Range, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 131, pl. 9, figs. 1a-1d.  
= *Pugnax rockymontana*.
109293. **Rhynchonella salpinx** Dall. Holotype.  
Eocene. City quarry, Wilmington, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III., Pt. VI, 1903, p. 1535, pl. 58, figs. 5, 6, 7.
23017. **Rhynchonella schucherti** Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles northwest of Paskenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 31, pl. 1, figs. 1-4.
13856. **Rhynchonella (Leiorhynchus) sinuatus** (Hall). Plesiotype.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 158, pl. 14, fig. 5.  
= *Liorhynchus sinuatum*.



14344. **Rhynchonella thera** Walcott. Cotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 223, pl. 7, figs. 6-6c.  
= *Camarophoria thera*.
8513. **Rhynchonella utah** Marcou. Plesiotypes.  
Upper Carboniferous. Exact locality unknown.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. 1, 1876,  
p. 128, pl. 9, figs. 2a-2c.  
= *Pugnax utah*.
8509. **Rhynchonella wahsatchensis** White. Holotype.  
Upper Carboniferous. Rock Canyon, Wahsatch Range,  
near Provo, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 19; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 130, pl. 9, figs. 3a-3d.  
= *Seminula wasatchensis*.
23018. **Rhynchonella whitneyi** (Gabb). Plesiotypes.  
Knoxville (Lower Cret.). Sulphur Creek, Colusa County,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895, p. 32, pl. 1, figs.  
5-10.
35399. **Rhynchotrema increbescens** Hall. Plesiotypes.  
Trenton (Ord.). Lexington, Kentucky.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 38, 39.
25552. **Rhyssomatus tabescens** Scudder. Plesiotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 123, pl. 11, fig. 9.
46298. **Rhytimya byrnesi** (Miller). Plesiotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 689, pl. 56, figs. 4, 5.
46299. **Rhytimya compressa** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 692, pl. 56, fig. 13.
46300. **Rhytimya convexa** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 691, pl. 56, figs. 2, 3.
46301. **Rhytimya mickleboroughi** (Whitfield). Plesiotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 690, pl. 56, figs. 14, 15.
46302. **Rhytimya oehana** Ulrich. Holotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 689, pl. 56, fig. 1.



46303. **Rhytimya producta** Ulrich. Cotypes.  
 46304. Lorraine (Ord.). Mount Sterling, Kentucky; Cincinnati, Ohio.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 688, pl. 56, figs. 6-9.
46305. **Rhytimya radiata** Ulrich. Cotypes.  
 Utica (Ord.). Covington, Kentucky.  
 Ulrich, Geol. Surv. Ohio, VII, 1893, p. 692, pl. 56, figs. 10-12.
46306. **Rhytimya sinuata** Ulrich. Holotype.  
 Trenton (Ord.). Near Wykoff, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 619, pl. 36, figs. 46, 47.
8159. **Rhytophorus meekii** White. Cotypes.  
 Bear River (Cret.). Sulphur Creek, Bear River Valley, Wyoming.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 82, pl. 30, figs. 8a, 8b; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 444, pl. 8, figs. 4, 5; Bull. No. 128, U. S. Geol. Surv., 1895, p. 43, pl. 5, figs. 6, 7.
500. **Rhytophorus priscus** Meek. Holotype.  
 Bear River (Cret.). Bear River, near mouth of Sulphur Creek, Wyoming.  
 Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 364, pl. 5, figs. 4a, b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 444, pl. 8, figs. 2, 3; Bull. No. 128, U. S. Geol. Surv., 1895, p. 43, pl. 5, figs. 4, 5.  
 See *Melampus priscus*.
20114. **Rimella macilenta** White. Cotypes.  
 Tejon (Eocene). Near New Idria, Fresno County, California.  
 White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 19, pl. 3, figs. 10-12.
112222. **Rimella smithii** Dall. Holotype.  
 Oligocene. Ocala, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 172, pl. 10, figs. 4, 6.
113865. **Ringicula chipolana** Dall. Holotype.  
 Chipola (Oligocene). Alum Bluff, Chattahoochee River, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 25; Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 58, fig. 9.
97465. **Ringicula floridana** Dall. Plesiotypes.  
 Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 14, pl. 3, fig. 8.



97466. *Ringicula (floridana var.?) guppyi* Dall. Plesiotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 1  
pl. 3, fig. 7.
113111. *Ringicula semilimata* Dall. Cotype  
Chipola (Oligocene). Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 24; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, fig. 24.
113570. *Rissoa athymorhyssa* Dall. Holotype  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 20, fig. 13b.
113574. *Rissoa (Onoba) callistrophia* Dall. Cotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 21, fig. 14a.
113572. *Rissoa (Onoba) geræa* Dall. Cotype  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 21, fig. 13a.
113573. *Rissoa (Onoba) geræa minor* Dall. Cotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 21, fig. 14b.
113569. *Rissoa lipeus* Dall. Holotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 20, fig. 8b.
113571. *Rissoa (Onoba) microcharia* Dall. Holotype  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 3  
pl. 20, fig. 8a.
107127. *Rissoa (Alvania) pariana* Guppy. Holotype  
Upper Oligocene. Pointapien, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 321, pl. 29, fig. 1.
113582. *Rissoina chipolana* Dall. Holotype  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. II, 1892, p. 3  
pl. 22, fig. 20.



113577. **Rissoina johnsoni** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 342,  
pl. 20, fig. 1.
155766. **Rochefortia planulata** (Stimpson). Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1161,  
pl. 45, fig. 7.
115102. **Rochefortia stantoni** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. V, 1900, p. 1160,  
pl. 43, fig. 11.
115103. **Rochefortia stimpsoni** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. V, 1900, p. 1160,  
pl. 45, fig. 5.
275. **Rostellaria biangulata** Meek and Hayden. Holotype and  
paratype.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci., Phila., VIII, 1856, p. 65.  
= *Aporrhais biangulata*.
9875. **Rostellaria ? collina** Conrad. Cotypes.  
Cretaceous. Between Rio San Pedro and Rio Puercos,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 157, pl. 13, figs. 3a, 3b.
9870. **Rostellaria ? texana** Conrad. Holotype.  
Cretaceous. Between Rio San Pedro and Rio Puercos,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 158, pl. 13, figs. 4a, 4b.
22927. **Rostellites ambigua** Stanton. Cotypes.  
22929. Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 156, pl. 33,  
figs. 8-10.
22928. **Rostellites dalli** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 156, pl. 33,  
figs. 11-13.
22930. **Rostellites gracilis** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 157, pl. 34,  
figs. 1-3.



9886. **Rostellites texana** Conrad. Cotype.  
Cretaceous. Eagle Pass, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 158, pl. 14, figs. 2a, 2b.
8929. **Rotella verruculifera** White. Cotypes.  
Upper Carboniferous. Near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl.  
1881, p. 32, pl. 4, figs. 7a-7d.
46570. **Saccospongia danvillensis** Ulrich. Cotypes.  
Trenton (Ord.). Danville, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 243.
46571. **Saccospongia rudis** Ulrich. Cotypes.  
Trenton (Ord.). Lexington, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 236, fig. 7; p. 242.
46307. **Saffordia modesta** (Ulrich). Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 627, pl. 41, figs. 29-31.  
See Cypricardites ? modestum.
46308. **Saffordia sulcodorsata** (Ulrich). Holotype.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 626, pl. 41, figs. 32, 33.  
See Cuneanya sulcodorsata.
46309. **Saffordia ventralis** Ulrich. Cotypes.  
46310. Richmond (Ord.). Spring Valley, Minnesota; Iron Ridge,  
Wisconsin.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 626, pl. 41, figs. 34-41.
8329. **Salenia texana** Credner. Plesiotype.  
Washita (Lower Cret.). Cileola, Comanche Spring, Texas.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 40, pl. 10, figs. 1a-2.
45980. **Salpingostoma buelli** (Whitfield). Plesiotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 900, pl. 67, fig. 37.
45981. **Salpingostoma buelli kentuckyensis** Ulrich. Cotype.  
Black River (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 901.
45982. **Salpingostoma imbricata** Ulrich and Scofield. Holotype.  
Richmond (Ord.). Spring Valley, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 902, pl. 82, figs. 21, 22.



45983. **Salpingostoma richmondensis** Ulrich. Holotype.  
Richmond (Ord.). Richmond, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 903, pl. 67, figs. 39, 40.
45984. **Salpingostoma sculptilis** Ulrich and Scofield. Cotype.  
Trenton (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 902, pl. 82, fig. 16.
15375. **Salterella pulchella** Billings. Plesiotype.  
Lower Cambrian. East of Swanton, Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 144, pl. 13, fig.  
3; pl. 12, figs. 7-7c; Tenth Ann. Rept. U. S. Geol. Surv.,  
1890, p. 625, pl. 79, figs. 5, 5b-5e.
14901. **Salterella rugosa** Billings. Plesiotype.  
Lower Cambrian. L'Anse au Loup, Labrador.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 145, pl. 13, fig.  
2; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 625, pl. 79,  
fig. 4.
20096. **Sanguinolaria ? caudata** White. Cotypes.  
Puget (Cret.). Carbonado, Washington.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 61, pl. 10, figs. 1-3.
107105. **Sanguinolaria unioides** Guppy. Holotype.  
Tertiary. Savana Grande, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 327, pl. 30, fig. 11.
14389. **Sanguinolites æolus** Hall. Plesiotype.  
14390. Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 247, pl. 20, figs.  
6, 7, 9.  
=Sphenotus æolus.
13903. **Sanguinolites ? combensis** Walcott. Holotype.  
Middle Devonian. Combs Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 175, pl. 15, fig. 16.
13904. **Sanguinolites ? gracilis** Walcott. Cotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 175, pl. 4, fig. 10.
14391. **Sanguinolites ? nænia** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 249, pl. 19, fig. 9.
7733. **Sanguinolites (Promacrus) nasutus** Meek. Holotype.  
Chouteau (Miss.). Chouteau Springs, Cooper County,  
Missouri.  
Meek, Amer. Journ. Conch., VII, 1871, p. 6, pl. 1, fig. 1.



14392. **Sanguinolites retusus** Walcott. Cotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 247, pl. 20, fig. 1.
13901. **Sanguinolites rigidus** (White and Whitfield). Plesiotype  
Upper Devonian. The Gate, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 176, pl. 16, fig. 1.  
= *Sphenotus contractus*.
14393. **Sanguinolites salteri** Walcott. Holotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 248, pl. 20, fig. 2.
13902. **Sanguinolites ? sanduskyensis** Meek. Plesiotype  
Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 176, pl. 5, fig. 4.
14394. **Sanguinolites simplex** Walcott. Holotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 248, pl. 20, fig. 3.
14395. **Sanguinolites striatus** Walcott. Cotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 249, pl. 23, fig. 1.  
= *Cypricardella striata*.
13905. **Sanguinolites ventricosus** (White and Whitfield). Plesiotype  
Upper Devonian. Rescue Hill, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 177, pl. 15, fig. 3.
1869. **Saxicava abrupta** Conrad. Cotype  
Post-Pliocene. San Pedro, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean  
V, 1856, p. 324, pl. 3, figs. 25, 25a.
111585. **Saxicava bilineata** Conrad. Plesiotype  
111612. Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 92, pl. 1,  
figs. 1-3.
12300. **Saxicava jurassica** Whitfield. Cotype  
Jurassic. Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1891,  
p. 376, pl. 5, figs. 25-30.
164871. **Saxidomus popofianus** Dall. Holotype  
Miocene. Popof Island, Shumagins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 115, pl. 10, fig. 1.



112190. **Scala (Opalia) debouryi** Dall. Holotype.  
Oligocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 244,  
pl. 20, fig. 13.
130038. **Scala ranellina** Dall. Cotypes.  
Jacksonian (Eocene). Cocoa, Choctaw County, Alabama.  
Dall, The Nautilus, IX, No. 10, 1896, p. 111.
106904. **Scala (Sthenorytis) stearnsii** Dall. Holotype.  
Pliocene. San Diego, California.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
245, pl. 21, fig. 4.
115864. **Scala virginiana** Clark. Holotype.  
Eocene. Aquia Creek, Virginia.  
Clark, Johns Hopkins Univ. Circ. No. 15, 1895, p. 4; Bull. No.  
141, U. S. Geol. Surv., 1896, p. 71, pl. 14, figs. 3a, 3b.
263. **Scalaria cerethiformis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 63.  
= Chemnitzia cerithiformis.
7991. **Scalaria hemphillii** Dall. Cotypes.  
Pliocene. San Diego, California.  
Dall, Proc. U. S. Nat. Mus., I, 1878, p. 16.
115437. **Scalaria leroyi** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 406, pl. 16, fig.  
10; pl. 18, fig. 2.
111647. **Scalaria multistriata** Say. Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 126, pl. 23,  
fig. 5.
8920. **Scalaria unilineata** Heilprin. Holotype.  
Eocene. Jackson, Mississippi.  
Heilprin, Proc. U. S. Nat. Mus., III, 1880, p. 150, fig. 5.
26544. **Scalaripora canadensis** Whiteaves. Cotypes.  
Hamilton (Dev.). Thedford, Ontario, Canada.  
Whiteaves, Cont. to Canadian Pal., I, Pt. V, 1898, p. 378, pl. 48,  
figs. 10a, 10b.
45985. **Scalites angulatus** Emmons. Plesiotype.  
Chazy (Ord.). Chazy, New York.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 933, fig. 4.



135060. **Scapharca (Bathyarca) spenceri** Dall. Holotype  
Pliocene. Tehuantepec, Panama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 25,  
pl. 32, figs. 16, 24.
149025. **Scapharca (Scapharca) staminata** Dall. Holotype  
Oligocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 2,  
pl. 31, figs. 11, 13.
113801. **Scapharca (Argina) tolepia** Dall. Holotype  
Oligocene. Potrero, Rio Amino, Santo Domingo.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 24,  
pl. 33, figs. 7, 8.
107722. **Scapharca (Scapharca) triphera** Dall. Holotype  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 62,  
pl. 33, fig. 6.
111804. **Scaphella (Caricella) demissa** (Conrad). Plesiotype  
Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
pl. 7, fig. 3.
111830. **Scaphella floridana** (Heilprin). Plesiotype  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 2,  
pl. 7, fig. 8.
111802. **Scaphella (Caricella) leana** Dall. Holotype  
Eocene. Prairie Creek, Wilcox County, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
pl. 6, fig. 9.
6088. **Scaphella (Aurinia) obtusa** (Emmons). Plesiotype  
Miocene. Locality in North Carolina not known.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
pl. 7, fig. 7.
- Scaphella podagrina** Dall. See *Caricella podagrina*.
111814. **Scaphella (Caricella) subangulata** (Conrad). Plesiotype  
Upper Eocene. Garland Creek, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
pl. 6, fig. 11.
111832. **Scaphella trenholmii** (Tuomey and Holmes). Plesiotype  
Oligocene. Alum Bluff, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 7,  
pl. 6, fig. 10.



6927. **Scaphiocrinus ? hemisphericus** (Shumard). Plesiotypes.  
Upper Carboniferous. Bennetts Mill, near Nebraska City,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 147,  
pl. 5, figs. 1a, 1b.  
= *Delocrinus hemisphericus*.
409. **Scaphites abyssinus** (Morton). Plesiotypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 441, pl. 35,  
figs. 2a, 2b.
386. **Scaphites cheyennensis** (Owen). Plesiotypes.  
402. Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 437, pl. 35,  
figs. 3a-e; 3f-i of the *Aptychus*.  
See *Ammonites moreauensis*.
398. **Scaphites conradi** (Morton). Plesiotypes.  
400. Fox Hills (Cret.). Long Lake, North Dakota, and Moreau  
River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 430, pl. 36,  
figs. 2a-f.  
See *Ammonites nebrascensis*.
399. **Scaphites conradi gulosus** (Morton). Plesiotypes.  
Fox Hills (Cret.). Near Fox Hills, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 432, pl. 36,  
fig. 1.
408. **Scaphites conradi intermedius** Meek. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 433, pl. 34,  
figs. 3a-c.
229. **Scaphites larvæformis** Meek and Hayden. Holotype.  
Fort Benton (Cret.). East base of Black Hills, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 58.—  
Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 418,  
pl. 6, figs. 6a-c.—Stanton, Bull. No. 106, U. S. Geol. Surv.,  
1893, p. 182, pl. 44, fig. 2.
410. **Scaphites mandanensis** (Morton). Plesiotypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 443, pl. 35,  
figs. 1a-c.  
See *Ammonites ? mandanensis*.
1924. **Scaphites mullananus** (Meek and Hayden). Holotype.  
Colorado (Cret.). Chippewa Point, upper Missouri River.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 187, pl. 45,  
figs. 2-4.  
See *Ammonites mullananus*.



405. **Scaphites nicolletii** (Morton). Plesiotypes.  
 407. Fox Hills (Cret.). Moreau River and Cheyenne River,  
 near Black Hills, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 435, pl. 34, figs.  
 2a-b, 4a-c.
12284. **Scaphites nodosus** Owen. Plesiotypes.  
 Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
 Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 441, pl. 13, fig. 12.
367. **Scaphites nodosus brevis** Meek. Holotype.  
 Fort Pierre (Cret.). Yellowstone River, near Miles City,  
 Montana.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 426, pl. 25,  
 figs. 1a-c.
12289. **Scaphites nodosus brevis** Meek. Plesiotypes.  
 Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
 Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 443, pl. 13, figs. 8, 9.
364. **Scaphites nodosus plenus** Meek and Hayden. Holotype.  
 Fort Pierre (Cret.). Yellowstone River, near Miles City,  
 Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 177.—  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 429, pl. 26,  
 figs. 1a-c.
365. **Scaphites nodosus quadrangularis** Meek. Holotype  
 366. and paratypes.  
 370. Fort Pierre (Cret.). Yellowstone River, near Miles City,  
 Montana, and Cheyenne River, South Dakota.  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 428, pl. 25,  
 figs. 2a-c.
12291. **Scaphites nodosus quadrangularis** Meek. Plesiotypes.  
 Fort Pierre (Cret.). Cheyenne River, near Rapid Creek,  
 Black Hills, South Dakota.  
 Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
 p. 443, pl. 13, figs. 10, 11.
1903. **Scaphites ventricosus** Meek and Hayden. Cotypes.  
 1904. Fort Benton (Cret.). Chippewa Point, near Fort Benton,  
 Montana.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1862, p. 22.—  
 Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 425,  
 pl. 6, figs. 8a-8c.
1903. **Scaphites ventricosus** Meek and Hayden. Cotypes and  
 1904. plesiotypes.  
 18817. Colorado (Cret.). Chippewa Point, near Fort Benton, and  
 Cinnabar Mountain, Montana.  
 Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 186, pl. 44, figs.  
 8-10; pl. 45, fig. 1.



1902. **Scaphites vermiformis** Meek and Hayden. Holotype.  
Fort Benton (Cret.). Chippewa Point, near Fort Benton,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1862, p. 22.—  
Meek, Ninth Ann. Rept. U. S. Geol. Surv. Terr., 1876, p. 423,  
pl. 6, figs. 4a, 4b.
225. **Scaphites warreni** Meek and Hayden. Holotype.  
Fort Benton (Cret.). Southern base of Black Hills, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 177.—  
Meek, Rept. U. S. Geol. Surv., IX, 1876, p. 420, pl. 6, fig. 5.  
See *Scaphites wyomingensis*.
8636. **Scaphites warreni** Meek and Hayden. Plesiotype.  
Colorado (Cret.). Three miles southwest of San Mateo,  
New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 200, pl. 19, fig. 3a.
12262. **Scaphites warreni** Meek and Hayden. Plesiotypes.  
12290. Colorado (Cret.). East fork Beaver Creek, Black Hills,  
South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 444, pl. 13, figs. 1-4.
225. **Scaphites warreni** Meek and Hayden. Holotype and  
12258. plesiotypes.  
12262. Colorado (Cret.). Black Hills, South Dakota.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 185, pl. 44, figs. 4-7.  
See *Scaphites wyomingensis*.
12258. **Scaphites wyomingensis** (Meek and Hayden). Plesiotypes.  
Fort Benton (Cret.). Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 446, pl. 13, figs. 5-7.  
=*Scaphites warreni*.
45986. **Scenella affinis** Ulrich and Scofield. Holotype.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 840, pl. 61, figs. 36, 37.
45987. **Scenella affinis obsoleta** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 841.
46532. **Scenella beloitensis** Ulrich and Scofield. Plastotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, p. 839, pl. 61, figs. 33, 34.



45988. **Scenella compressa** Ulrich and Scofield. Holotype  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fin.  
Rept., III, Pt. II, 1897, p. 840, pl. 61, figs. 38-41.
15367. **Scenella? conula** Walcott. Cotype  
Lower Cambrian. Prospect Mountain, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 15, pl. 9, fig. 1;  
Bull. No. 30, U. S. Geol. Surv., 1886, p. 127, pl. 8, figs. 6a, 6b;  
Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 616, pl. 5,  
figs. 4, 4a.
45989. **Scenella magnifica** Ulrich and Scofield. Plastotype  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fin.  
Rept., III, Pt. II, 1897, p. 839, pl. 82, figs. 7-9.
45990. **Scenella radialis** Ulrich and Scofield. Plastotype  
Trenton (Ord.). St. Paul, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fin.  
Rept., III, Pt. II, 1897, p. 841, pl. 61, figs. 31, 32.
15368. **Scenella reticulata** Billings. Plesiotype  
18323. Lower Cambrian. Topsail Head, Conception Bay, New  
foundland.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 125, pl. 12, figs.  
6, 6a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 616, pl. 5,  
figs. 9-9d.
15369. **Scenella retusa** Ford. Plesiotype  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 126, pl. 12, figs.  
3a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 5,  
fig. 6a.
45991. **Scenella superba** Billings. Plesiotype  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fin.  
Rept., III, Pt. II, 1897, p. 838, pl. 61, fig. 35.
15370. **Scenella? varians** Walcott. Cotype  
Lower Cambrian. Two miles east of Highgate Springs,  
Vermont.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 127, pl. 12, figs.  
2, 2a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 5,  
figs. 5, 5a.
43289. **Scenellopora radiata** Ulrich. Holotype  
Trenton? (Ord.). Knoxville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 158, pl. 1,  
figs. 6, 6a, 6b.
43478. **Sceptropora facula** Ulrich. Cotypes and figured sections  
Richmond (Ord.). Stony Mountain, Manitoba.  
Ulrich, Amer. Geol., I, 1888, p. 229, fig. 1.



43474. **Sceptropora fustiformis** Ulrich. Cotypes.  
Clinton (Sil.). Hamilton, Ontario.  
Ulrich, Geol. Surv. Canada, Contr. Micro-Pal. Cambro-Sil., Pt. II,  
1889, p. 46.
24556. **Schizambon typicalis** Walcott. Cotype.  
Upper Pogonip (Ord.). East of Hamburg mine, Eureka  
District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 70, pl. 1, figs. 3a-d.
115404. **Schizaster antillarum** Cotteau. Holotype.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 28,  
pl. 5, figs. 3-5.
115408. **Schizaster clevei** Cotteau. Holotype.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 29,  
pl. 5, figs. 7, 8.
115391. **Schizaster loveni** Cotteau. Cotypes.  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 29,  
pl. 5, figs. 9-13.
115416. **Schizaster subcylindricus** Cotteau. Cotypes.  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet-Akad. Hand., XIII, 6, 1874, p. 31,  
pl. 5, figs. 14-17.
35247. **Schizodus affinis** Herrick. Plesiotypes.  
35248. Upper Coal Measures. Near Lehigh and McAlester quad-  
rangle, Indian Territory.  
Girty, 19th Ann. Rept. U. S. Geol. Surv., 1900, p. 582, pl. 72,  
figs. 4a-4f.
14401. **Schizodus cuneatus** Meek. Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 252, pl. 20, fig. 8.
35312. **Schizodus cuneatus** Meek ? Plesiotype.  
Rico (Upper Carb.). Scotch Creek, Rico quadrangle,  
Colorado.  
Girty, U. S. Geol. Surv., Prof. Pap. No. 16, 1903, p. 439, pl. 9, fig. 10.
14404. **Schizodus curtiforme** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 253, pl. 22, figs.  
3, 3a.
6496. **Schizodus curtus** Meek and Worthen ? Plesiotype.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv., Nebraska (Hayden), 1872,  
p. 208, pl. 10, figs. 3a-3g.



14402. **Schizodus deparcus** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 252, pl. 22, fig. 5.
46367. **Schizodus magnus** Worthen. Plastotype  
Chester (Miss.). Randolph County, Illinois.  
Worthen, Bull. No. 2, Ill. State Mus. Nat. Hist., 1884, p. 9.
35251. **Schizodus meekanus** Girty. Cotype.  
35252. Upper Coal Measures. Boggy Creek, McAlester quad-  
rangle, and Atoka quadrangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 583, p.  
72, figs. 7a-7c.
13921. **Schizodus (Cytherodon) orbicularis** Walcott. Cotype.  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 181, pl. 5, figs.  
8, 8a.
3960. **Schizodus ovatus** Meek and Hayden. Holotype.  
Permian. Cottonwood Creek, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 59, pl. 2, figs. 11a, 11b.  
See *Axinus* (*Schizodus*) *ovatus*.
35250. **Schizodus pandatus** Girty. Holotype.  
Upper Coal Measures. Boggy Creek, McAlester quad-  
rangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 583, p.  
72, fig. 5a.
14403. **Schizodus pintoënsis** Walcott. Cotype.  
Lower Carboniferous. Near Pinto Peak, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 253, pl. 22, figs. 2, 2a.
35246. **Schizodus subcircularis** Herrick. Plesiotype.  
Upper Coal Measures. McAlester quadrangle, Indian  
Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 582, p.  
72, fig. 8a.
35249. **Schizodus telliniformis** Girty. Holotype.  
Upper Coal Measures. Boggy Creek, McAlester quad-  
rangle, Indian Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 583, p.  
72, fig. 6a.
8503. **Schizodus wheeleri** (Swallow). Plesiotype.  
Upper Carboniferous. Near Bear Spring, Camp Wingate,  
New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, p.  
p. 154, pl. 11, figs. 6a, 6b.



45992. **Schizolopha moorei** Ulrich. Cotypes.  
 45993. Richmond (Ord.). Richmond, Indiana.  
 Lorraine (Ord.). Covington, Kentucky (Cincinnati, Ohio,  
 in error).  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1897, p. 992, pl. 65, figs. 31-37.
45992. **Schizolopha textilis** Ulrich. Holotype.  
 Trenton (Ord.). Nashville, Tennessee.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1897, p. 992, pl. 65, fig. 30.
1845. **Schizothærus nuttalli** Conrad. Cotypes.  
 Post-Pliocene. San Pedro, California.  
 Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
 V, 1856, p. 324, pl. 4, figs. 33, 33a.  
 = *Tresus nuttallii*.
41296. **Schmidtella affinis** Ulrich. Cotypes.  
 Trenton (Ord.). Near Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1894, p. 641, pl. 43, figs. 45-47.
41299. **Schmidtella brevis** Ulrich. Holotype.  
 Trenton (Ord.). Fountain, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 642, pl. 45, figs. 34, 35.
41295. **Schmidtella crassimarginata** Ulrich. Holotype.  
 Stones River (Ord.). Mineral Point, Wisconsin.  
 Ulrich, Amer. Geol., X, 1892, p. 269, pl. 9, figs. 27-30; Geol. and  
 Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 640,  
 pl. 43, figs. 42-44.
41298. **Schmidtella incompta** Ulrich. Cotypes.  
 Trenton (Ord.). Fountain, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1894, p. 642, pl. 45, figs. 27, 32, 33.
41297. **Schmidtella incompta subæqualis** Ulrich. Holotype.  
 Trenton (Ord.). Near Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1894, pl. 43, figs. 39-41.
41300. **Schmidtella subrotunda** Ulrich. Cotypes.  
 Stones River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1894, p. 643, pl. 45, figs. 39-42.
41301. **Schmidtella umbonata** Ulrich. Cotypes.  
 Black River (Ord.). St. Paul, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
 II, 1894, p. 641, pl. 45, figs. 36-38.



25661. **Schroederoceras casiensis** (Whitfield). Plesiotypes.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 473, pl. 7, figs. 4-6.
25660. **Schroederoceras eatoni** (Whitfield). Plesiotypes.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc. XXXII, 1894, p. 470, pl. 6, figs. 31-34; pl. 7, figs. 7, 8.
27206. **Schuchertites grahami** Smith. Holotype.  
Upper Coal Measures. Graham, Young County, Texas.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 50, pl. 21, figs. 20-22.
25555. **Sciabregma rugosa** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 147, pl. 12, fig. 8.
25597. **Sciomyza ? manca** Scudder. Cotype.  
25712. Older Tertiary. Green River, Wyoming.  
Scudder, Thirteenth Ann. Rept. U. S. Geol. Surv. Terr., 1890, p. 543, pl. 4, fig. 9.
20123. **Scobinella dilleri** White. Cotypes.  
Chico (Cret.). Eighteen miles east of Redding, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 25, pl. 4, figs. 1-3.
13966. **Scoliostoma americana** Walcott. Cotypes.  
Middle Devonian. Atrypa Peak, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 195, pl. 6, figs. 1-1e.
13334. **Scutella striatula** Conrad. Plesiotype.  
Miocene. California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean, VII, 1857, pl. 9, figs. 1a, 1b.
25521. **Scythropus ? abacus** Scudder. Holotype.  
Older Tertiary. White River, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 60, pl. 9, fig. 15.
25520. **Scythropus somniculosus** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 60, pl. 9, fig. 18.
25517. **Scythropus subterraneus** Scudder. Cotypes.  
Older Tertiary. White River, Colorado and Utah.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 59, pl. 9, fig. 14.
- Sedgwickia. See also Allorisma (Sedgwickia).



1021. **Sedgwickia ? altirostrata** (Meek and Hayden). Holotype.  
Upper Carboniferous. Juniata, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 41, pl. 1, fig. 9.  
See *Allorisma ? altirostrata*.
1023. **Sedgwickia concava** Meek and Hayden. Cotypes.  
Upper Carboniferous. Region of Nemaha, Nebraska.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 41, pl. 1, figs. 8a, 8b.  
See *Lyonsia* (*Panopæa*) *concava*.
15229. **Sedgwickia ? concava** Meek and Hayden. Plesiotypes.  
Permian or Triassic. Southeast of Salt Lake City, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 276, pl. 6, fig. 3.
46760. **Sedgwickia (Sanguinolites) subarcuata** Meek and Worthen. Plastotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Meek and Worthen, Geol. Surv. Ill., III, 1868, p. 537, pl. 19,  
fig. 3b.
1011. **Sedgwickia topekaensis** (Shumard)? Plesiotypes.  
Upper Carboniferous. Leavenworth, Kansas.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 40, text figs. A, B.
21701. **Sedgwickia topekaensis** (Shumard). Plesiotype.  
Permian. Godwin Creek, Baylor County, Texas.  
White, Bull. No. 77, U. S. Geol. Surv., 1891, p. 26, pl. 4, fig. 11.
28136. **Seelya difficilis** Whitfield? Plesiotypes.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1009, figs. 7c, 7d.
45995. **Seelya mundula** Ulrich. Cotypes.  
Lorraine (Ord.). Newport, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1012, pl. 70, figs. 11, 12.
28187. **Seelya (?) (Plethospira ?) ulrichi** Schuchert. Cotypes.  
Trenton (Ord.). Head of Frobisher Bay, Baffin Land.  
Schuchert, Proc. U. S. Nat. Mus., XXII, 1900, p. 166, pl. 12, figs.  
9, 10.
45996. **Seelya ventricosa** Ulrich. Holotype.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1009, fig. 5.



114263. **Seila adamsii attenuata** Dall. Cotype  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 22
114861. **Semele alumensis** Dall. Holotype  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 989, pl. 43, fig. 4.
115057. **Semele bella appressa** Dall. Cotype  
115059. Miocene. Duplin County, North Carolina.  
155788. Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990
155789. **Semele bella bella** (Conrad). Plesiotype  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990
115058. **Semele bella duplinensis** Dall. Cotype  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990
107378. **Semele carinata compacta** Dall. Holotype  
Oligocene, Miocene, and Pliocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990, pl. 36, figs. 23, 26.
114630. **Semele chipolana** Dall. Holotype  
Chipola (Upper Oligocene). Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 986, pl. 37, fig. 3.
114678. **Semele cythereoidea** Dall. Holotype  
Chipola (Upper Oligocene). Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990, pl. 44, fig. 5.
155790. **Semele leana** Dall. Cotype  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 992, pl. 37, figs. 1, 2.
114656. **Semele mutica** Dall. Cotype  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 990, pl. 43, fig. 12.
155782. **Semele mutica scintillata** Dall. Holotype  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 988, pl. 43, fig. 2.



114656. **Semele mutica stearnsii** Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 988, pl. 43, fig. 16.
135900. **Semele nuculoidea striulata** Dall. Cotypes.  
Oligocene. Oak Grove, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 994.
155791. **Semele perlamellosa** Heilprin. Plesiotypes.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 992, pl. 37, figs. 4, 5.
162526. **Semele pulchra montereyi** Arnold. Plesiotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 166, pl. 15, figs. 4, 4a.
114657. **Semele smithii** Dall. Holotype.  
Oligocene. McClellan's Farm, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 987, pl. 43, fig. 6.
4788. **Semele stimpsoni** Dall. Holotype.  
Miocene. Penjinsk Gulf, Siberia.  
Dall, Proc. U. S. Nat. Mus., XVI, 1893, p. 473, pl. 56, fig. 5.
43330. **Semicoscium planodorsatum** Ulrich. Holotype.  
Onondaga (Dev.). Falls of the Ohio River.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 555, pl. 44, figs. 3-3b.  
= *Semicoscium permarginatum*.
43329. **Semicoscium rhombicum** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 556, pl. 44, figs. 4-4a; pl. 54, fig. 8.
35194. **Seminula humilis** Girty. Cotypes.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 565, pl. 71, figs. 6a-6c.
35195. **Seminula immatura** Girty. Cotypes.  
Madison (Miss.). West of Antler Peak, Gallatin Range, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 566, pl. 71, figs. 5a-5d.
35191. **Seminula madisonensis** Girty. Cotypes.  
Madison (Miss.). Conant Creek, Teton Range, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 563, pl. 71, figs. 2a, 2b, 2c.



35192. **Seminula madisonensis pusilia** Girty. Holotype and  
paratype.  
Madison (Miss.). North of Little Sunlight Creek, Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 564, pl. 71, figs. 3a, 3b.
35332. **Seminula subquadrata** Hall? Plesiotype.  
Leadville (Miss.). Leadville District, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 296, pl. 1, fig. 3.
35193. **Seminula subtilita** (Hall). Plesiotype.  
Upper Carboniferous. Near Weston, on Missouri River.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 564, pl. 71, figs. 4a-4c.
- 35333 to 35338. **Seminula subtilita** (Hall). Plesiotypes.  
Hermosa and Rico (Upper Carb.). Bear Creek, Hermosa Creek, Cliff South of Carson Creek, and Animas River. Durango quadrangle; Scotch Creek and Sandstone Mountain, Rico quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 403, pl. VII, figs. 1-10.
12549. **Septocardia carditoidea** Hall and Whitfield. Holotype.  
Jurassic. Shoshone Springs, Augusta Mountains, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 296, pl. 7, fig. 25.
12538. **Septocardia typica** Hall and Whitfield. Cotype.  
Jurassic. Shoshone Springs, Augusta Mountains, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 295, pl. 7, figs. 26, 27.
43313. **Septopora biserialis** Swallow. Figured section of  
plesiotype.  
Upper Coal Measures. Kansas City, Missouri.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 631, pl. 56, fig. 11.
44092. **Septopora cestriensis** Prout. Plesiotype.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 628, pl. 64, figs. 1-1d.
43312. **Septopora decipiens** Ulrich. Cotype.  
Chester (Miss.). Sloans Valley, Pulaski County, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 630, pl. 66, fig. 9.
43794. **Septopora robusta** Ulrich. Figured sections of cotype.  
Upper Coal Measures. Fayette County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 633, pl. 56, figs. 9-9c.



43300. **Septopora robusta intermedia** Ulrich. Cotypes and  
43301. figured section.  
Chester (Miss.). Sloans Valley, and near Litchfield,  
Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 634, pl. 56, fig. 10; pl. 64,  
figs. 4-4a.
43795. **Septopora subquadrans** Ulrich. Cotypes and figured  
44111. section.  
Chester (Miss.). Sloans Valley, Kentucky, and Chester,  
Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 629, pl. 56, figs. 7, 8; pl. 64,  
figs. 2, 2b.
113435. **Serpula mendica** Dall. Cotypes.  
Pliocene. Caloosahatchie, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 306.
226. **Serpula ? tenuicarinata** Meek and Hayden. Cotypes.  
Fort Benton (Cret.). Mouth of Vermilion River, South  
Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 134.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 507, pl. 6,  
fig. 1.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 53,  
pl. 1, fig. 2.
112579. **Serpulorbis (granifera var. ?) ballistæ** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 304, pl. 22, fig. 21.
112274. **Serpulorbis granifera tenera** Dall. Holotype.  
Miocene. Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 303.
27203. **Shumardites simondsi** Smith. Paratype.  
Upper Coal Measures. Graham, Young County, Texas.  
Smith, Mon. XLII, U. S. Geol. Surv., 1903, p. 135, pl. 3, figs. 3-10.
158317. **Siderastrea hexagonalis** Vaughan. Holotype.  
Midwayan (Eocene). Prairie Creek, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 155, pl. 18,  
figs. 1-4.
112967. **Sigaretus chipolanus** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 379, pl. 17, fig. 7.
112970. **Sigaretus multiplicatus** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 379, pl. 20, figs. 12, 12b.



3553. **Sigaretus scopulosus** Conrad. Cotype  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 727, Atlas, pl. 3, figs. 6, a.
22914. **Sigaretus (Euaticina?) textilis** Stanton. Cotype  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 139, pl. 3, figs. 5, 6.
22894. **Siliqua huerfanensis** Stanton. Cotype  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 114, pl. 25, figs. 10, 11.
156887. **Siliqua (patula var.?) oregonia** Dall. Holotype  
Miocene. Two Mile Creek, near Coos Bay, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 67.
157839. **Siphonalia? lineata** Stanton. Cotype  
Lower Tejon (Eocene). One mile north of Pacheco, and one mile southeast of Lower Lake, California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897, p. 1047, pl. 67, fig. 7.
4791. **Siphonaria penjinæ** Dall. Cotype  
Miocene. Penjinsk Gulf, Siberia.  
Dall, Proc. U. S. Nat. Mus., XVI, 1893, p. 475, pl. 56, fig. 2.
4754. **Siphonotreta? curta** Dana. Holotype  
Carboniferous. Glendon on the Hunter, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 685, Atlas, pl. 3, figs. 5, 5a, 5b.  
[A pelecypod.]
115421. **Sismondia anguillæ** Cotteau. Holotype  
Miocene. Anguilla, West Indies.  
Cotteau, Kongl. Svenska Vet.-Akad. Hand., XIII, 6, 1874, p. 1, pl. 3, figs. 5-8.
115394. **Sismondia antillarum** Cotteau. Cotype  
Eocene. St. Bartholomew, West Indies.  
Cotteau, Kongl. Svenska Vet.-Akad. Hand., XIII, 6, 1874, p. 1, pl. 3, figs. 1-4.
25524. **Sitona paginarum** Scudder. Cotype  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 68, pl. 10, fig. 1.
13827. **Skenidium devonicum** Walcott. Holotype  
Middle Devonian. Lone Mountain, near Eureka, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 116, pl. 13, figs. 4, 4a.  
= Dalmanella devonica.



14561. **Smithia hennahii** (Lonsdale). Plesiotypes.  
Upper Devonian. Babylon Hill, White Pine District,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 32,  
pl. 2, figs. 6, 6a.
1169. **Smithia verrilli** Meek. Cotypes.  
Base of Upper Devonian. Anderson River, Mackenzie  
River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 83, pl. 11, figs. 7-7b.  
= *Phillipsastræa verrilli*.
113509. **Solariaxis alabamense** Dall. Holotype.  
Eocene. Matthews Landing, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 324, pl. 22, fig. 17.
113511. **Solariaxis aldrichi** Dall. Cotypes.  
Eocene. Wahtubbee Hills, east of Enterprise, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 325, pl. 22, figs. 13, 13a.
113507. **Solariaxis cossmanni** Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 324, pl. 22, figs. 14, 14a.
113512. **Solariaxis leanum** Dall. Holotype.  
Eocene. Wahtubbee Hills, east of Enterprise, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 325,  
pl. 22, fig. 12.
113510. **Solariaxis periscelidum** Dall. Holotype.  
Eocene. Matthews Landing, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 325,  
pl. 22, fig. 11.
107125. **Solariella altiuscula** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 324, pl. 27, fig. 17.
113078. **Solariella louisiana** Dall. Holotype.  
Eocene. Near Enterprise, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 407,  
pl. 23, fig. 1.
113081. **Solariella turritella** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 408,  
pl. 23, fig. 2.
107075. **Solariorbis clypeatus** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 323, pl. 27, fig. 3.



113539. *Solarium amphitermum* Dall. Cotype.  
Miocene. Greensboro, Caroline County, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 33,  
pl. 22, figs. 16, 16a.
113532. *Solarium bellastriatum newtonense* Dall. Holotype.  
Eocene. Newton, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 35.
6200. *Solarium bellastriatum vicksburgensis* Dall. Cotype.  
Oligocene. Vicksburg, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 37,  
pl. 22, figs. 4, 4a.
113548. *Solarium granulatum chipolanum* Dall. Cotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 38.
113544. *Solarium johnsoni* Dall. Cotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 39,  
pl. 22, figs. 15, 15a.
115468. *Solarium semidecussatum* Guppy. Holotype.  
Pliocene. Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 408, pl. 18, fig. 1.
113538. *Solarium textilinum* Dall. Holotype.  
Eocene. Wahtubbee Hills, Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 39,  
pl. 22, figs. 1-3.
13412. *Solarium wallalense* White. Holotype.  
Chico (Cret.). Wallala, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1885, p. 14, pl. 5, figs. 1-3.
155776. *Solecardia (Spaniorinus) cossmanni* Dall. Cotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 119,  
pl. 45, figs. 27, 27a.
23060. *Solecurtus ? dubius* Stanton. Cotype.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 7,  
pl. 10, figs. 4, 5.
3654. *Solecurtus ? ellipticus* Dana. Holotype.  
Carboniferous. Wollongong Point, Illawarra, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 686, Atlas, pl. 1,  
fig. 9.



3631. **Solecurtus (Psammobia ?) planulatus** Dana. Holotype.  
Carboniferous. Harpers Hill on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 686, Atlas, pl. 2,  
fig. 10.
8913. **Solemya bilix** White. Holotype.  
Montana (Cret.). Four miles north of Golden, Colorado.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 158; *ibid.*, IV, 1881,  
p. 139, fig. 9.
22874. **Solemya ? obscura** Stanton. Holotype.  
Colorado (Cret.). Poison Canyon, Huerfano Park, Colo-  
rado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 95, pl. 21, fig. 8.
23051. **Solemya occidentalis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles northwest of  
Paskenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 55,  
pl. 10, figs. 2, 3.
459. **Solemya subplicata** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 129, pl. 28,  
fig. 19.  
See *Solen subplicatus*.
3486. **Solemya ventricosa** Conrad. Holotype.  
3567. Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 723, Atlas, pl. 17,  
figs. 7, 8.
135901. **Solen amphistemma** Dall. Holotype.  
Oligocene. Oak Grove, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 952,  
pl. 39, fig. 8.
154270. **Solen conradi** Dall. Plesiotype.  
Oligocene or Miocene. Astoria, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 953.
184. **Solen ? dakotaensis** Meek and Hayden. Holotype.  
Dakota (Cret.). Just below mouth of Vermilion River,  
South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 142.  
= *Pharella dakotaensis*.
140118. **Solen (Plectosolen) lisbonensis abruptus** Dall. Cotypes.  
Claibornian (Eocene). Clarke County, Mississippi.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 953.



156884. **Solen (Plectosolen) protextus (Conrad)?** Plesiotype  
Upper Eocene or Miocene. Coos Bay, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 65.  
See Donax? protexta.
449. **Solen subplicatus** Meek and Hayden. Holotype  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 2.  
=Solemya subplicata.
8922. **Soleniscus brevis** White. Cotype  
8925. Upper Carboniferous. Coyote Creek, and near Taos, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl. 1881, p. 28, pl. 4, figs. 5a-5c.
8923. **Soleniscus planus** White. Cotype  
Upper Carboniferous. Coyote Creek, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., III, Suppl. 1881, p. 29, pl. 4, figs. 4a-4c.
9142. **Soleniscus? (Macrocheilus) ponderosus** Swallow? Plesiotype  
Upper Carboniferous. Vermilion County, Illinois.  
White, Proc. U. S. Nat. Mus., VI, 1883, p. 187, pl. 8, figs. 1-3;  
Thirteenth Ann. Rept. Geol. Surv. Ind., 1884, p. 156, pl. 2, figs. 1, 2.
9372. **Soleniscus (Macrocheilus) ventricosus** Hall. Plesiotype  
12210. Upper Carboniferous. Springfield and Danville, Illinois.  
White, Proc. U. S. Nat. Mus., VI, 1883, p. 187, pl. 8, figs. 4-6;  
Thirteenth Ann. Rept. Geol. Surv. Ind., 1884, p. 155, pl. 2, figs. 11, 12.
14380. **Solenomya curta** Walcott. Cotype  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 242, pl. 22, figs. 6, 11.
47412. **Solenomya varsoviensis** Worthen. Plastotype  
Keokuk (Miss.). Warsaw, Illinois.  
Worthen, Geol. Surv. Ill., VIII, 1890, p. 131, pl. 19, fig. 8.
18337. **Solenopleura bombifrons** Matthew. Plesiotype  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 656, pl. 97, figs. 5, 5a.
18338. **Solenopleura? harveyi** Walcott. Cotype  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 45; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 656, pl. 97, figs. 7, 7a.



18336. **Solenopleura? howleyi** Walcott. Cotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Proc. U. S. Nat. Mus., XII, 1889, p. 45; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 657, pl. 97, figs. 8, 8a.
15425. **Solenopleura nana** Ford. Plesiotype.  
17451. Lower Cambrian. Troy, and Washington County, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 214, pl. 27, fig. 3; Amer. Journ. Sci. (3), XXXIV, 1887, p. 196, pl. 1, fig. 1-1d; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 658, pl. 98, figs. 1-1e, 2.
17452. **Solenopleura? tumida** Walcott. Holotype.  
Lower Cambrian. Washington County, New York.  
Walcott, Amer. Journ. Sci. (3), XXXIV, 1887, p. 196, pl. 1, figs. 2, 2a; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 658, pl. 98, figs. 3, 3a.
35236. **Solenopleura? weedi** Walcott. Holotype and paratype.  
Flathead (Middle Cambrian). Crowfoot section, Gallatin Range, Yellowstone National Park.  
Walcott, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 464, pl. 65, figs. 9, 9a.
6488. **Solenopsis solenoides** (Geinitz). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 223, pl. 10, fig. 3.
45997. **Solenospira pagoda** (Salter). Plesiotypes.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1022, pl. 70, figs. 56, 57.
46072. **Solenospira prisca** (Billings). Plesiotypes.  
46073. Stones River (Ord.). Beloit and Janesville, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, 1897, p. 1022, pl. 70, figs. 53, 55.
46074. **Solenospira prisca extenuata** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 1022, pl. 70, fig. 52.
112050. **Solenosteira inornata** Dall. Cotypes.  
Oligocene. Banks of Hillsboro River, near Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 123; Pt. II, 1892, p. 234, pl. 20, fig. 17.
112131. **Solenosteira mengineana** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 122, pl. 9, fig. 1.



109266. *Solenosteira vauhani* Dall. Holotype  
Miocene. Coes Mill Run, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1901,  
pl. 60, fig. 18.
43254. *Spatiopora aspera* Ulrich. Cotypes and figured section  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI 1883, p. 166, pl.  
5, 5a, 5b.
43253. *Spatiopora iowensis* Ulrich. Cotype  
Utica (Ord.). Graf, Iowa.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1893, p. 321.
43255. *Spatiopora labeculosa* Ulrich. Holotype and figured section  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
I, 1893, p. 320, pl. 28, figs. 1, 2.
43252. *Spatiopora lineata* Ulrich. Holotype  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 167, pl.  
fig. 7.
43257. *Spatiopora maculosa* Ulrich. Holotype  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 167, pl.  
fig. 6.
43299. *Spatiopora maculosa incepta* Ulrich. Cotype  
Black River (Ord.). Chatfield, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
1893, p. 320.  
= *Spatiopora lineata incepta*.
43256. *Spatiopora montifera* Ulrich. Holotype and figured section  
Richmond (Ord.). Waynesville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 168, pl.  
figs. 1, 1a; pl. 7, fig. 8.
12511. *Sphæra whitneyi* Meek. Cotype  
12524. Upper Triassic. Buena Vista Canyon, West Humboldt  
Range, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 137,  
pl. 10, 4, a-c.
457. *Sphæriola ? cordata* (Meek and Hayden). Holotype  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 137, pl. 10,  
figs. 3a-c.  
See *Cyprina cordata*.



12385. **Sphæriola ? endotrachys** Meek. Holotype.  
Fox Hills (Cret.). Ninety miles below Fort Benton,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 139, pl. 29,  
fig. 2.
7835. **Sphæriola obliqua** Meek. Holotype.  
Fox Hills (Cret.). Lefthand Creek, between Long Moun-  
tain and Boulder City, Colorado.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr. (2), I, 1875, p. 46.
12316. **Sphæriola transversa** Whitfield. Cotypes.  
Fox Hills (Cret.). Cheyenne River, near Old Woman  
Fork, Black Hills, Wyoming.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 415, pl. 10, figs. 14-16.
458. **Sphæriola ? warrenana** Meek. Holotype.  
Fox Hills (Cret.). Near eastern base of Black Hills,  
South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 138.
2125. **Sphærium formosum** (Meek and Hayden). Paratypes.  
Laramie (Cret.). Ten miles below Fort Union, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 526.  
See *Cyclas formosa* and *C. fragilis*.
20063. **Sphærium formosum** (Meek and Hayden). Plesiotype.  
Eocene. Wales, Utah.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 21, pl. 4, figs. 5, 6.
12520. **Sphærium ? idahoense** Meek. Cotypes.  
Miocene. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 183,  
pl. 16, figs. 1, a.
2130. **Sphærium planum** Meek and Hayden. Holotype.  
Laramie (Cret.). Near Grand Island, Upper Missouri  
River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 175.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 526, pl. 43,  
figs. 6a, 6b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 439, pl. 17, fig. 8.
2129. **Sphærium recticardinale** Meek and Hayden. Holotype and  
paratypes.  
Laramie (Cret.). Near Grand Island, Missouri River,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 176.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 527, pl. 43,  
figs. 3a, 3b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 439, pl. 27, fig. 9.



12521. **Sphærium rugosum** Meek. Cotypes.  
Miocene. Fossil Hill, Kawsoh Mountains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 182,  
pl. 16, figs. 2, a, b.
2128. **Sphærium subellipticum** (Meek and Hayden). Holotype.  
Fort Union (Cret.). Ten miles below Fort Union, North  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 527, pl. 43, figs.  
5a, 5b.  
See *Cyclas subellipticus*.
35059. **Sphærocystites bloomfieldensis** Schuchert. Cotypes.  
Manlius (Sil.). Clark's Mill, near New Bloomfield, Penn-  
sylvania.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 251.
35053. **Sphærocystites globularis** Schuchert. Holotype.  
35077. Manlius (Sil.). Near Keyser, West Virginia, and Devil's  
Backbone, near Cumberland, Maryland.  
Schuchert, Amer. Geol., XXXII, 1903, p. 233; Smithsonian  
Misc. Coll., Quart., XLVII, 1904, p. 252, text figs. 40, 41; pl. 38,  
figs. 3-5; pl. 39, figs. 5, 6.
35054. **Sphærocystites globularis ovalis** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 253,  
pl. 38, fig. 6.
35052. **Sphærocystites multifasciatus** Hall. Plesiotypes.  
35058. Manlius (Sil.). Near Keyser, West Virginia, and Cash  
Valley, near Cumberland, Maryland.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 250,  
text figs. 38, 39; pl. 38, figs. 1, 2; pl. 39, figs. 1-4.
26441. **Sphærodictya subsphærica** (Walcott). Plesiotype.  
Utica (Ord.). Near Holland Patent, New York.  
Hall and Clarke, Mem. II, New York State Mus., 1898 (Oct.,  
1899), p. 26, pl. 1, figs. 14, 15.  
See *Teganium subsphæricum*.
107806. **Sphenia attenuata** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. IV, 1898, p. 86,  
pl. 35, fig. 9.
114679. **Spheniopsis americana** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Calhoun County,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci., Phila., III, Pt. VI, 1903, p. 1508,  
pl. 57, figs. 28, 29.



29386. **Sphenodiscus beecheri** Hyatt. Paratype.  
Ripley (Upper Cret.). Three miles northeast of Ripley,  
Mississippi.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 81.
7754. **Sphenodiscus lenticularis** (Owen). Plesiotype.  
Fox Hills (Upper Cret.). Moreau River, South Dakota.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 71, pl. 8, figs. 1, 2.
- 20863c. **Sphenodiscus lenticularis mississippiensis** Hyatt. Cotypes.  
Ripley (Upper Cret.). Three miles northeast of Ripley,  
Mississippi.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 77, pl. 9, figs. 7-9.
2403. **Sphenodiscus lobatus** (Tuomey). Plesiotypes.  
20577. Ripley (Upper Cret.). Landers Mill, Tippah County, and  
Pontotoc County, Mississippi.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 66, pl. 6, figs. 1, 2;  
pl. 7, figs. 1, 2; pl. 9, fig. 13.
- 19145a. **Sphenodiscus pleurisepta** (Conrad). Plesiotypes.  
19145b. Eagle Pass (Upper Cret.). Near Eagle Pass, Texas.  
29384. Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, pp. 59-65, pl. 3, figs.  
29385. 13, 14; pl. 4, figs. 1, 2; pl. 5, figs. 1, 2.  
See *Ammonites pleurisepta*.
29386. **Sphenodiscus stantoni** Hyatt. Cotypes.  
Eagle Pass (Upper Cret.). Near Eagle Pass, Texas.  
Hyatt, Mon. XLIV, U. S. Geol. Surv., 1903, p. 70, pl. 5, fig. 4; pl. 6,  
fig. 5.
46311. **Sphenolium striatum** Ulrich. Holotype.  
Trenton (Ord.). Thirteen miles south of Cannon Falls,  
Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1894, p. 624, pl. 36, figs. 44, 45.
158089. **Sphenotrochus claibornensis** Vaughan. Cotypes.  
Claibornian (Eocene). Claiborne, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 85, pl. 6,  
figs. 1-3a (? pl. 5, fig. 22).
158083. **Sphenotrochus nanus** (Lea). Plesiotypes.  
158084. Claibornian (Eocene). Claiborne, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 80, pl. 5,  
figs. 21-24 (? fig. 22).
24336. **Sphenotus gorceixi** Clarke. Cotypes.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 59, pl. 5,  
fig. 15.



43310. **Sphragiopora parasitica** Ulrich. Cotype  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 638, pl. 65, figs. 6, 6a.  
Spirifer sp. undet. Meek = *Spirifer perlamellosus*.
7807. **Spirifer agelaius** Meek? Cotype  
Lower Carboniferous. Old Baldy, near Virginia City  
Montana.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 470, an  
footnote.—White, Twelfth Ann. Rept. U. S. Geol., Surv. Terr.  
Pt. I, 1883, p. 135, pl. 34, figs. 10, 10b.  
[Listed as *Spirifer triradialis* Phillips, but changed to *S. agelaius*.
14225. **Spirifer albapinensis** Hall and Whitfield. Cotype  
Waverly (Miss.). Logan Canyon, Wahsatch Range  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II  
1877, p. 255, pl. 4, fig. 7.—Girty, Mon. XXXII, U. S. Geol.  
Surv., Pt. II, 1899, p. 547, pl. 72, figs. 3c, 3d (as *S. centronatus*  
var.).  
= *Spirifer centronatus albapinensis*.
12671. **Spirifer (Spiriferina?) alia** Hall and Whitfield. Holotype  
Triassic. South of Dun Glen Pass, Pah-Ute Range  
Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I  
1877, p. 281, pl. 6, fig. 17.
14320. **Spirifer annectans** Walcott. Holotype  
Lower Carboniferous. Richmond Mountain, Eureka Dis-  
trict, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 216, pl. 18, fig.  
7, 7a.
13832. **Spirifer (Trigonotreta) argentarius** Meek. Cotype  
Upper Devonian. Treasure Hill, White Pine District  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 4  
pl. 3, figs. 4-4b.  
= *Spirifer pinonensis*.
17944. **Spirifer attenuatus** Sowerby? Plesiotype  
Keokuk (Miss.). Keokuk Rapids of Mississippi River  
Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3A, fig.  
= *Spirifer keokuk*.
14979. **Spirifer belphegor** Clarke. Holotype  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 30, pl. 3, fig.
35318. **Spirifer boonensis** Swallow? Plesiotype  
35319. Hermosa (Upper Carb.). Bear Creek and South Fork  
Hermosa Creek, Durango quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 381, pl. 6 figs.  
1-1b, 2, 2a, 3.



6531. **Spirifer cameratus** Morton. Plesiotypes.  
 6985. Upper Carboniferous. Near and at Nebraska City,  
 Nebraska.  
 Meek, Final Rept. U. S. Geol. Surv., Neb. (Hayden), 1872, p. 183,  
 pl. 6, fig. 12; pl. 8, fig. 15.  
 See *Spirifer inæquicostatus* and *S. triplicata*.
645. **Spirifer cameratus** Morton. Plesiotype.  
 Upper Carboniferous. Summit of Spring Pass, east of  
 Eureka, Nevada.  
 Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 353,  
 pl. 2, fig. 3b.  
 See *Spirifer* (*Trigonotreta*) *cameratus*.
8502. **Spirifer cameratus** Morton. Plesiotypes.  
 9164. Upper Carboniferous. Santa Fé, New Mexico, and Mad-  
 ison County, Iowa.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 132, pl. 10, figs. 1a-1d.
645. **Spirifer** (*Trigonotreta*) **cameratus** (Morton). Plesiotype.  
 Upper Carboniferous. Summit of Spring Pass, east of  
 Eureka, Nevada.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 91,  
 pl. 9, figs. 2, 2a.  
 =*Spirifer cameratus*.
17923. **Spirifer cedarensis** Owen. Holotype.  
 Middle Devonian. Two and one-half miles below Rock-  
 ingham, Iowa.  
 Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3, fig. 5.  
 =*Spirifer iowensis*.
14224. **Spirifer centronata** Winchell. Plesiotypes.  
 Waverly (Miss.). Dry Canyon, Oquirrh Mts., Utah.  
 Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
 1877, p. 254, pl. 4, figs. 5, 6.—Girty, Mon. XXXII, Pt. II,  
 U. S. Geol. Surv., 1899, p. 547, pl. 70, fig. 3b.  
 See *Spirifer albapinensis*.
8532. **Spirifer centronatus** Winchell. Plesiotypes.  
 Lower Carboniferous. Mountain Spring, Old Mormon  
 Road, Nevada.  
 White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
 p. 86, pl. 5, figs. 8a-8c.—Girty, Mon. XXXII, Pt. II, U. S.  
 Geol. Surv., 1899, p. 547, pl. 70, fig. 3a.  
 See *Spirifer albapinensis*.
35185. **Spirifer centronatus semifurcatus** Girty. Cotypes.  
 Madison (Miss.). Crowfoot Ridge, Yellowstone National  
 Park.  
 Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 549, pl. 70,  
 fig. 4a.



13840. **Spirifer compactus** Meek. Cotypes.  
Base of Upper Devonian. Lockhart River, Mackenzie  
River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 102, pl. 14, figs.  
11a-h.  
= *Reticularia fimbriata*.
33964. **Spirifer coniculus** Girty. Cotypes.  
Ouray (Upper Dev.). Engineer Mountain, Colorado.  
Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 47,  
pl. 5, figs. 1-4.
14230. **Spirifer (Syringothyris) cuspidatus** (Martin)? Plesiotype.  
Lower Carboniferous. Treasure Hill, White Pine Moun-  
tains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 87,  
pl. 3, figs. 11, 11a.  
= *Syringothyris carteri*.
3634. **Spirifer darwinii** Morris. Plesiotype.  
4756. Carboniferous. Glendon on the Hunter, New South  
Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 684, Atlas, pl. 1,  
figs. 7a, 7b.
14322. **Spirifer desiderata** Walcott. Holotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 217, pl. 7, fig. 8.
9587. **Spirifer disjunctus animasensis** Girty. Cotypes.  
14450. Ouray (Upper Dev.). Many localities in the Ouray lime-  
stone of central Colorado.  
33957.  
33963. Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 48,  
pl. 4, figs. 1-10.
3595. **Spirifer duodecicostatus** M'Coy. Plesiotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 684, Atlas, pl. 2,  
figs. 1a, 1b.
627. **Spirifer englemanni** Meek. Cotypes.  
7748. Upper Devonian. Neills Valley, east of Eureka, Nevada.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 308; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 346, pl. 1, figs. 1-1c;  
Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 41, pl. 3,  
figs. 3-3c (3d-3f?).—Girty, Mon. XXXII, U. S. Geol. Surv.,  
Pt. II, 1899, p. 504, pl. 66, figs. 3a, 3b, 3c, 3d.
17924. **Spirifer euruteines** (Owen). Cotypes.  
Middle Devonian. Pine Creek, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 586,  
pl. 3, figs. 2, 2a, 6-6b.  
See *Delthyris euruteines*.



8540. **Spirifer (Syringothyris) extenuatus** (Hall). Plesiotype.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 88, pl. 5, figs. 9a-9d.  
= *Syringothyris extenuata*.
14021. **Spirifer (Martinia) franklinii** Meek. Holotype.  
Base of Upper Devonian. Forty miles below the Ram-  
parts of Mackenzie River, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 107, pl. 14, figs. 12a-c.  
= *Reticularia franklinii*.
3663. **Spirifer glaber** (Martin). Plesiotypes.  
Carboniferous. Black Head, Illawarra, and Harpers Hill,  
New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 683, Atlas, pl. 1,  
figs. 6a-f.
8483. **Spirifer (Martinia) glaber contractus** Meek and Worthen. Plesiotypes.  
Upper Carboniferous. Camp Cottonwood, Lincoln County,  
Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874,  
p. 20; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1877, p. 136, pl. 10, figs. 2a-c.  
= *Martinia glabra contracta*.
13836. **Spirifer (Martinia) glabra nevadensis** Walcott. Cotype.  
Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 139, pl. 3, fig. 5;  
pl. 14, figs. 14-14b.  
= *Reticularia nevadensis*.
17954. **Spirifer inequicostatus** Owen. Holotype.  
Upper Carboniferous. ? Skunk River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 586,  
pl. 5, fig. 6.  
= *Spirifer cameratus*.
17925. **Spirifer iowensis** Owen. Holotype.  
Middle Devonian. Iowa River, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, p. 585,  
pl. 3, fig. 1.  
See *Spirifer cedarensis*, *S. ligus*, and *S. pennatus*.
5899. **Spirifer kennicotti** Meek. Holotype.  
Base of Upper Devonian. Liards River, Mackenzie River  
Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 101, pl. 14, figs. 9a, 9b.



996. **Spirifer (Martinia) planoconvexus** (Shumard). Plesiotypes  
6503. Upper Carboniferous. Manhattan, Kansas, and Nebraska  
City, Nebraska.  
Meek and Hayden, Pal. Upper Mo., Smithsonian Cont. to Knowl.  
No. 172, XIV, 1864, p. 21, text figs. a-e.—Meek, Final Rept  
U. S. Geol. Surv. Neb. (Hayden), 1872, p. 184, pl. 8, figs  
2a, 2b.  
= *Ambocoëlia planoconvexa*.
14980. **Spirifer pluto** Clarke. Cotype.  
Genesee (Dev.). Bristol, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 31, pl. 3, fig. 12.  
See *Liorhynchus? hecate*.
649. **Spirifer (Spiriferina) pulcher** (Meek). Cotypes.  
Upper Carboniferous. Long Valley and Ruby Valley,  
east of Eureka, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 352  
pl. 2, figs. 1a-1h.
649. **Spirifer pulchra** Meek. Cotypes.  
Upper Carboniferous. Long Valley and Ruby Valley,  
east of Eureka, Nevada.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 310.  
= *Spiriferina pulchra*.
13829. **Spirifer raricosta** (Conrad). Plesiotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 135, pl. 4, figs  
2, 2a; pl. 14, fig. 12.  
= *Spirifer (Delthyris) raricosta*.
5897. **Spirifer (Martinia) richardsoni** Meek. Holotype.  
Base of Upper Devonian. Fort Good Hope, Mackenzie  
River, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 104, pl. 14, figs. 23-x.  
[A young specimen of *S. compactus* Meek.]  
= *Reticularia fimbriata*.
8488. **Spirifer rockymontanus** Marcou. Plesiotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV., Pt. I, 1878  
p. 134, pl. 11, figs. 9a-9d.
- 35320 **Spirifer rockymontanus** Marcou. Plesiotypes  
to Hermosa and Weber (Upper Carb.). Empire Gulch and  
35322. Horseshoe Mountain, Leadville District and Engineer  
Mountain quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 383, pl. 6, figs  
4, 4a, 5, 5a, 6, 6a, 7, 7c.



644. **Spirifer scobina** Meek. Cotypes.  
Upper Carboniferous. Divide between Long Valley and  
Ruby Valley, east of Eureka, Nevada.  
Meek, Proc. Acad. Nat. Sci. Phila., 1860, p. 310.  
= *Spiriferina scobina*.  
See *Spirifer* (*Trigonotreta*) *scobina*.
644. **Spirifer** (***Spiriferina* ?**) ***scobina*** (Meek). Cotypes.  
Upper Carboniferous. Divide between Long Valley and  
Ruby Valley, east of Eureka, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 351,  
pl. 2, figs. 5a-5c.
644. **Spirifer** (***Trigonotreta***) ***scobina*** (Meek). Cotypes.  
Upper Carboniferous. Divide between Long Valley and  
Ruby Valley, east of Eureka, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 90,  
pl. 9, figs. 1-1d.  
= *Spiriferina scobina*.
14229. **Spirifer setigera** Hall. Plesiotype.  
Lower Carboniferous. North of Snowstorm Hill, Dry  
Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 270, pl. 5, fig. 17.  
= *Reticularia setigera*.
14223. **Spirifer striata** (Martin). Plesiotypes.  
Lower Carboniferous. Dry Canyon, Oquirrh Mountains,  
Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 269, pl. 5, figs. 13-15.
8528. **Spirifer striatus** (Martin). Plesiotypes.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 88, pl. 5, fig. 10a.
35184. **Spirifer striatus madisonensis** Girty. Cotypes.  
Madison (Miss.). Crowfoot Ridge, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 551, pl. 70,  
figs. 2a-2d.
629. **Spirifer strigosus** Meek. Cotypes.  
Upper Devonian. Neils Valley, east of Eureka, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 347,  
pl. 1, figs. 5-5d.  
See *Spirifer macra* and *S.* (*Trigonotreta*) *strigosus*.



629. **Spirifer (Trigonotreta) strigosus** (Meek). Cotypes.  
Upper Devonian. Neils Valley, east of Eureka, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 43,  
pl. 3, figs. 5-5b.  
See *Spirifer macra*.
35203. **Spirifer subattenuatus** Hall. Plesiotypes.  
Madison (Miss.). Stinkingwater Valley, Absaroka Range,  
Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 550.
14323. **Spirifer trigonalis** (Martin). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 215, pl. 18, fig. 11.
15063. **Spirifer triplicata** Hall. Cotypes.  
Upper Carboniferous. Weston, Missouri.  
Hall, Stansbury's Expl. and Surv. Valley, Great Salt Lake, Utah,  
1852, p. 410, pl. 4, figs. 5a-5e.  
=*Spirifer camerata*.
13839. **Spirifer (Martinia) undifera** (Roemer). Plesiotype.  
13873. Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 143, pl. 3, figs.  
3-3b, 6, 6a; pl. 14, figs. 11-11b.  
=*Reticularia fimbriata*.
626. **Spirifer utahensis** Meek. Cotypes.  
Upper Devonian. White Pine District, Nevada.  
Meek, Rept. Expl. Great Basin of Utah, Simpson, 1876, p. 345,  
pl. 1, figs. 4-4c; Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I,  
1877, p. 39, pl. 3, figs. 1-1e.  
See *Spirifer norwoodi*.
3596. **Spirifer vespertilio** Sowerby. Plesiotypes.  
Carboniferous. Black Head, District of Illawarra, New  
South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 685, Atlas, pl. 2,  
figs. 3a, 3b, 3c.
- Spirifera*. See *Spirifer*.  
*Spiriferina*. See also *Spirifer* (*Spiriferina*).
14332. **Spiriferina cristata** (Schlotheim). Plesiotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 218, pl. 18, figs.  
5, 12, 13.  
=*Spirifer spinosa*.
14459. **Spiriferina gonionota** Meek. Holotype.  
Upper Carboniferous. Railroad Canyon, Diamond Moun-  
tains, Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 84, pl. 8,  
figs. 5-5b (named at end of description).



8492. **Spiriferina kentuckensis** Shumard. Plesiotypes.  
Upper Carboniferous. Near Santa Fe, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 138, pl. 10, fig. 4c.  
See *Spirifer octoplicata*.
35340. **Spiriferina kentuckyensis** Shumard. Plesiotype.  
Hermosa (Upper Carb.). Rico quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 400, pl. 6,  
fig. 11.
8501. **Spiriferina octoplicata** (Sowerby). Plesiotype.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I,  
1876, p. 139, pl. 10, figs. 8a-8c.
14452. **Spiriferina pulchra** (Meek). Cotypes and plesiotypes.  
14456. Upper Carboniferous. Long Valley and Ruby Valley, and  
White Pine District, Nevada; Weber Canyon, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 85,  
pl. 8, figs. 1-1e; pl. 12, figs. 12-12d.  
See *Spirifer pulchra*.
35199. **Spiriferina solidirostris** (White). Plesiotype.  
Madison (Miss.). Gallatin Range, Yellowstone National  
Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 545, pl. 71,  
fig. 10a.
35339. **Spiriferina solidirostris** (White)? Plesiotypes.  
Millsap (Miss.). Perry Park, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 294, pl. 1,  
figs. 3, 4.
8533. **Spirigera monticola** White. Cotypes.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 16; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 91, pl. 5, figs. 11a-11d.  
= *Athyris monticola*.
8534. **Spirigera obmaxima** (McChesney). Plesiotypes.  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 92, pl. 5, fig. 12.  
= *Cliothyris obmaxima*.
8514. **Spirigera planosulcata** (Phillips). Plesiotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 143, pl. 10, figs. 5a-5d.  
= *Cliothyris royssii*.



8507. **Spirigera subtilita** (Hall). Plesiotypes.  
Upper Carboniferous. Exact locality unknown.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 141, pl. 10, figs. 6a-6c.  
= *Seminula subtilita*.
14688. **Spirocyathus atlanticus** (Billings). Plesiotype.  
15301. Lower Cambrian. Straits of Belle Isle, Labrador, and  
Silver Peak, Nevada.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 600, pl. 1,  
figs. 1b-d, 2, 2a.  
See *Archæocyathus atlanticus*.
23853. **Spirodentalium osceola** Walcott. Cotypes.  
Upper Cambrian. Osceola Mills, Wisconsin.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 271, pl. 20, fig. 12.
270. **Spiro nema tenuilineata** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 342, pl. 32,  
figs. 9a-c.  
See *Turbo tenuilineatus*.
115428. **Spirorbis clymenioides** Guppy. Holotype.  
Eocene. San Fernando, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 534,  
pl. 26, fig. 10.
9073. **Spirorbis ? dickhauti** White. Cotypes.  
Eocene. Little Rock, Arkansas.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 161.  
= *Tubulostium dickhauti*.
164882. **Spisula callistæformis** Dall. Holotype.  
Eocene. Chicagof Cove, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, p. 108, pl. 9, fig. 9.
115067. **Spisula (Hemimactra) curticens** Dall. Cotypes.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 898, pl. 27, figs. 2, 24.
153779. **Spisula (Hemimactra) delumbis** Conrad. Plesiotypes.  
Miocene. York River, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 897, pl. 27, fig. 26.
135906. **Spisula (Hemimactra) densa** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 900, pl. 27, fig. 22.



135905. **Spisula (Hemimactra) dodona** Dall. Cotypes.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 896, pl. 27, figs. 7, 13, 25.
153784. **Spisula (Hemimactra) duplinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 898, pl. 30, fig. 1.
115080. **Spisula (Hemimactra ?) magnoliana** Dall. Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 899, pl. 27, fig. 29.
153782. **Spisula (Hemimactra) marylandica** Dall. Holotype.  
Miocene. Jones Wharf, Patuxent River, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 897, pl. 28, fig. 5.
153803. **Spisula (Hemimactra) subponderosa** (d'Orbigny).  
Plesiotype.  
Miocene. St. Marys, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 899, pl. 27, figs. 3, 16.
114817. **Spondylus bostrychites chipolanus** Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 758.
23024. **Spondylus fragilis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson, Tehama  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 35,  
pl. 2, fig. 3.
111622. **Spondylus inornatus** Whitfield. Holotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 34, pl. 5,  
figs. 1, 2.
155735. **Sportella compressa** (Lea). Plesiotype.  
Miocene and Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1130, pl. 25, fig. 3a.
155732. **Sportella constricta** (Conrad). Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III,  
p. 1128, pl. 25, figs. 4, 4a.
135869. **Sportella lioconcha** Dall.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V,  
p. 1128, pl. 44, fig. 24.



135871. **Sportella lubrica** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1127, pl. 44, fig. 9.
135872. **Sportella obolus** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1126, pl. 44, fig. 18.
155726. **Sportella pelex** Dall. Holotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1131, pl. 44, fig. 10.
155725. **Sportella petropolitana** Dall. Holotype.  
Miocene. Petersburg, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1130, pl. 45, fig. 10.
155734. **Sportella protexta** (Conrad). Plesiotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1129, pl. 25, f. 3.
135873. **Sportella unicarinata** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1127, pl. 44, fig. 13.
111589. **Sportella whitfieldi** Dall. Holotype.  
Miocene. Jericho, Cumberland County, New Jersey.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1128.
144323. **Sportella yorkensis** Dall. Holotype.  
Miocene. Near Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1130,  
pl. 44, fig. 1.
35315. **Squamularia perplexa** (McChesney). Plesiotypes.  
35316. Hermosa (Upper Carb.). Deadwood Gulch, Rico quad-  
rangle and Punch Gulch, Crested Butte quadrangle.  
Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 392, pl. 6,  
figs. 8, 9, 10, 11.
20137. **Stearnsia robinsi** White. Cotypes.  
Washita (Lower Cret.). Six miles north of Fort Worth.  
Texas.  
White, Proc. Acad. Nat. Sci. Phila., for 1887, p. 33, pl. 2, figs. 7-9  
= Remondia robinsi.
25480. **Steganus barrandei** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 28, pl. 8, fig. 5.



43710. **Stellipora antheloidea** Hall. Plesiotype and figured sections.  
Trenton (Ord.). Trenton Falls, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 263, pl. 14,  
figs. 1, 1a.
43642. **Stellipora limitaris** Ulrich. Cotypes.  
Richmond (Ord.). Clarksville, Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 126, pl. 12,  
figs. 8-8c.  
= *Constellaria limitaris*.
44066. **Stenopora americana** Ulrich. Figured sections and frag-  
ment of holotype.  
Keokuk (Miss.). Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 437, pl. 74, figs. 1, 1a.
43322. **Stenopora americana varsoviensis** Ulrich. Figured  
sections of holotype.  
Keokuk (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 437, pl. 74, figs. 3, 3a.
43323. **Stenopora angularis** Ulrich. Figured sections and fragment  
of holotype.  
Keokuk (Miss.). Lagrange, Missouri.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 439, pl. 74, figs. 6-6b.
43319. **Stenopora carbonaria** Worthen. Figured sections of  
plesiotype.  
Coal Measures (Upper Carb.). Lawrence, Kansas.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 445, pl. 73, figs. 8, 8a.
43315. **Stenopora carbonaria conferta** Ulrich. Figured sections  
of holotype.  
Coal Measures (Upper Carb.). Caseyville, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 446, pl. 73, figs. 9, 9a.
43316. **Stenopora carbonaria maculosa** Ulrich. Holotype and  
figured sections.  
Coal Measures (Upper Carb.). Caseyville, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 445, pl. 73, figs. 10, 10a.
43314. **Stenopora cestriensis** Ulrich. Figured sections of holotype.  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 442, pl. 74, figs. 7, 7a.
43318. **Stenopora emaciata** Ulrich. Holotype and figur  
Keokuk (Miss.). Bentonsport, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 438, pl
43317. **Stenopora intercalaris** Ulrich. ]  
fra  
Keokuk (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 435,



43325. *Stenopora intermittens* Ulrich. Holotype and figured sections.  
Keokuk (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 440, fig. 16.
43320. *Stenopora meekana* Ulrich. Figured sections of holotype  
Chester (Miss.). Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 443, pl. 73, figs. 7-7a.
44065. *Stenopora montifera* Ulrich. Figured sections and fragment  
of holotype.  
Keokuk (Miss.). Otter Creek, Jersey County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 438, pl. 74, figs. 4-4b.
43321. *Stenopora ramosa* Ulrich. Cotypes and figured sections.  
Chester (Miss.). Sloans Valley, Pulaski County, Ken-  
tucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 442, pl. 73, figs. 6, 6c.
43324. *Stenopora rudis* Ulrich. Holotype and figured sections.  
Chester (Miss.). Sloans Valley, Pulaski County, Ken-  
tucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 444, pl. 72, figs. 8-8b.
43798. *Stenopora? signata* Ulrich. Figured sections of holotype.  
Coal Measures (Upper Carb.). Caseyville, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 446, pl. 73, figs. 5, 5a, 5b.
43796. *Stenopora tuberculata* Prout. Figured sections of  
43797. plesiotypes.  
Chester (Miss.). Chester and Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 441, text fig. 17, figs. 17a, 17b.
14883. *Stenotheca? elongata* Walcott. Cotype and plesiotype.  
15364. Lower Cambrian. Secret Canyon, Eureka District.  
Nevada, and L'Anse au Loup, Labrador.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 23, pl. 9, figs.  
2, 2a; Bull. No. 30, U. S. Geol. Surv., 1886, p. 129, pl. 12, figs.  
4-4b; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl.  
74, figs. 9-9b.
15365. *Stenotheca rugosa* (Hall). Plesiotype  
Lower Cambrian. Troy, New York.  
Walcott, Bull. No. 30, U. S. Geol. Surv., 1886, p. 128, pl. 12, figs.  
1-1e; Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl.  
74, figs. 1-1i.
18310. *Stenotheca? rugosa acuta-costa* Walcott. Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 74,  
figs. 2-2b.
18311. *Stenotheca? rugosa erecta* Walcott. Cotypes.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 74,  
fig. 4.



18313. *Stenotheca? rugosa levis* Walcott. Holotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 74,  
figs. 5, 5a.
18312. *Stenotheca? rugosa paupera* (Billings). Plesiotype.  
Lower Cambrian. Conception Bay, Newfoundland.  
Walcott, Tenth Ann. Rept. U. S. Geol. Surv., 1890, p. 617, pl. 74,  
fig. 3.
45998. *Stenotheca unguiformis* Ulrich. Holotype.  
Trenton (Ord.). Mercer County, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 843, pl. 61, figs. 42-44.
157516. *Stephanocoenia fairbanksi* Vaughan. Holotype.  
Cretaceous? Southern California.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 151, pl. 17,  
figs. 11, 11a.
158318. *Stephanomorpha monticuliformis* Vaughan. Cotypes.  
158319. Midwayan (Eocene). Prairie Creek, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 157, pl. 18,  
figs. 5-7.
158215. *Steriphonotrochus pulcher* Vaughan. Holotype.  
Red Bluff (Oligocene). Red Bluff, Wayne County, Miss-  
issippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 113, pl. 9,  
figs. 5-5d.
43721. *Stictopora acuta* Hall. Plesiotype.  
Trenton (Ord.). Trenton Falls, New York.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 168, pl. 8,  
figs. 1, 1a, 1b.  
= *Pachydictya acuta*.
43720. *Stictopora basalis* Ulrich. Holotype.  
Stones River (Ord.). Shelbyville, Tennessee.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 169, pl. 8,  
figs. 4, 4a.  
= *Rhinidictya basalis*.
43651. *Stictopora gilberti* Meek. Plesiotype.  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 168, pl. 8,  
figs. 2, 2a.  
= *Cystodictya gilberti*.
43812. *Stictopora mutabilis* Ulrich. Cotype.  
Black River (Ord.). Minneapolis and St. Paul, Mi-  
nesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv.  
1886, p. 66.  
= *Rhinidictya mutabilis*.



43813. *Stictopora mutabilis major* Ulrich. Cotypes.  
Black River (Ord.). St. Paul and Minneapolis, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1886, p. 67.  
= *Rhinidictya mutabilis major*.
43470. *Stictoporella angularis* Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv., Minn., 1886, p. 71; Geol. and Nat. Hist., Surv. Minn., Final Rept., III, Pt. I, p. 182, pl. 11, figs. 1-3, 6, 8-11. 1893.
44101. *Stictoporella angularis intermedia* Ulrich. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota (Fillmore County, Minnesota, in error.)  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 183, pl. 11, figs. 4, 5, 7.
43770. *Stictoporella? basalis* Ulrich. Cotypes and figured sections.  
Warsaw (Miss.). Warsaw, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 532, pl. 68, figs. 5, 5a; pl. 55, figs. 2, 2a.  
= *Intrapora basalis*.
43471. *Stictoporella cribrosa* Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1886, p. 69; Geol. and Nat. Hist. Surv. Minn., Final Rept. III, Pt. I, 1893, p. 184, pl. 10, figs. 21-25; pl. 11, figs. 22, 23.
43613. *Stictoporella dumosa* Ulrich. Cotypes.  
Black River (Ord.). St. Paul, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 181.
43612. *Stictoporella exigua* Ulrich. Cotypes and figured sections.  
Trenton (Ord.). Montreal, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, pl. 13, figs. 18-21.
32472. *Stictoporella frondifera* Ulrich. Cotypes and figured sections.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Fourteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn., 1886, p. 72; Geol. and Nat. Hist. Surv. Minn., Final Rept. III, Pt. I, 1893, p. 183, pl. 11, figs. 12-19.
43722. *Stictoporella interstincta* Ulrich. Holotype.  
Utica (Ord.). West Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 169, pl. 1, figs. 9, 9a.  
= *Stictoporella flexuosa*.



43328. **Stictoporella interstincta** Ulrich. Figured section of  
plesiotype.  
Utica (Ord.). West Covington, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 394, figs. 14a, b.  
= **Stictoporella flexuosa**.
43723. **Stictoporella rigida** Ulrich. Holotype.  
Black River (Ord.). Fountain, Minnesota.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 188, figs. 13,  
13a-b; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, 1893,  
Pt. I, p. 180, pl. 11, figs. 20-21.
43377. **Stictoporella? undulata** Ulrich. Holotype.  
Chester (Miss.). Litchfield, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 533, pl. 69, figs. 6-6b.  
= **Intrapora undulata**.
43327. **Stictotrypa punctipora** (Hall). Figured sections of  
plesiotype.  
Waldron (Sil.). Waldron, Indiana.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 394, fig. 13a.
43326. **Stictotrypa similis** (Hall). Figured section of plesiotype.  
Waldron (Sil.). Waldron, Indiana.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 394, figs. 13b, c.
44060. **Stigmatella clavis** (Ulrich). Plesiotypes and figured sections.  
Utica (Ord.). Covington, Kentucky.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 34, pl. 10, fig. 4.  
See **Leptotrypa clavis**.
43197. **Stigmatella crenulata** Ulrich and Bassler. Cotypes and  
figured sections.  
Richmond (Ord.). Hanover, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 34, pl. 9, figs. 1-4; pl. 14, figs. 1, 2.
44059. **Stigmatella dychei** (James). Plesiotype and figured sections.  
Lorraine (Ord.). Lebanon, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 34, pl. 10, fig. 11.
43202. **Stigmatella interporosa** Ulrich and Bassler. Cotypes and  
figured sections.  
Richmond (Ord.). Hanover, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 35, pl. 12, figs. 4, 5.
44058. **Stigmatella irregularis** (Ulrich). Plesiotypes and figured  
sections.  
Lorraine (Ord.). Hamilton, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904,  
p. 34, pl. 10, figs. 5, 6; pl. 14, figs. 6-8.  
See **Chaetetes irregularis**.



43203. **Stigmatella nana** Ulrich and Bassler. Cotypes and figured sections.  
Utica (Ord.). West Covington, Kentucky.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 36, pl. 10, figs. 7-10; pl. 14, figs. 11, 12.
43204. **Stigmatella nicklesi** Ulrich and Bassler. Cotypes and figured sections.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 36, pl. 10, figs. 1-3; pl. 14, figs. 9, 10.
43201. **Stigmatella personata** Ulrich and Bassler. Holotype and figured sections.  
Richmond (Ord.). Hanover, Ohio.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 35, pl. 12, figs. 1-3.
43200. **Stigmatella spinosa** Ulrich and Bassler. Holotype and figured sections.  
Richmond (Ord.). Versailles, Indiana.  
Ulrich and Bassler, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 34, pl. 9, figs. 5-8.
20124. **Stomatia obstricta** White. Cotypes.  
Chico (Cret.). Little Cow Creek, Shasta County, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 18, pl. 4, figs. 10, 11.
43261. **Stomatopora inflata** Hall. Plesiotypes.  
43262. Lorraine (Ord.). Cincinnati, Ohio.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 117, pl. 1, figs. 13-21.
43263. **Stomatopora proutana** Miller. Plesiotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 117, pl. 1, figs. 8-12.  
=Stomatopora delicatula.
43260. **Stomatopora tenuissima** Ulrich. Holotype.  
Utica (Ord.). West Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 175, figs. 2-2c; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 116, pl. 1, figs. 16, 17.
43258. **Stomatopora turgida** Ulrich. Holotype.  
Richmond (Ord.). Wilmington, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XII, 1890, p. 176, figs. 3, 3a-c; Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I, 1893, p. 118, pl. 1, figs. 22, 23.



30185. **Stomechinus hyatti** Clark. Holotype.  
Jurassic. Taylorsville, California.  
Clark, Bull. No. 97, U. S. Geol. Surv., 1893, p. 56, pl. 23, figs. 1a-b.
33973. **Straparollus clymenioides** (Hall) ? Plesiotype.  
Ouray (Upper Dev.). Durango and Salida, Colorado.  
Girty, Twentieth Ann. Rept. U. S. Geol. Surv., Pt. II, 1900, p. 61, pl. 7, figs. 7, 8.
13941. **Straparollus newarkensis** Walcott. Cotypes.  
Upper Devonian. Newark Mountain, Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 187, pl. 16, figs. 7, 7a.
6510. **Straparollus (Euomphalus) rugosus** (Hall). Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 230, pl. 6, figs. 6a, 5b; pl. 11, fig. 4a.
14220. **Straparollus utahensis** (Hall and Whitfield). Cotypes and  
35146. plesiotypes.  
Madison (Miss.). Dry Canyon, Utah, and Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 573, pl. 66, figs. 10a, 10b, 10c.  
See *Euomphalus* (*Straparollus*) *utahensis*.
35314. **Streblopteria media** Herrick. Plesiotype.  
Millsap (Miss.). Perry Park, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 307, pl. 1, fig. 13.
14359. **Streblopteria similis** Walcott. Cotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 230, pl. 8, figs. 4-4d; pl. 19, fig. 7.
43482. **Streblotrypa amplexa** Ulrich. Holotype.  
Waverly (Miss.). Sciotoville, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 86, pl. 14, fig. 13.
43484. **Streblotrypa (Lioclema?) denticulata** Ulrich. Cotypes.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 88, pl. 14, figs. 18, 19.
43483. **Streblotrypa hertzeri** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 85, pl. 14, fig. 8.
44095. **Streblotrypa major** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 666, pl. 71, figs. 8, 8a; pl. 72, figs. 1, 1a.



43311. *Streblotrypa nicklesi* Ulrich. Cotypes and figured sections.  
Chester (Miss.). Kaskaskia, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 667, pl. 71, figs. 9-9c.
43481. *Streblotrypa striata* Ulrich. Holotype.  
Upper Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 87, pl. 14, figs. 12, 12a.
157842. *Strepsidura pachecoensis* Stanton. Holotype.  
Lower Tejon (Eocene). One mile north of Pacheco,  
California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1045, pl. 67, fig. 2.
33322. *Streptacis whitfieldi* Meek. Holotype.  
Upper Carboniferous. Danville, Illinois.  
Meek, Proc. Acad. Nat. Sci. Phila., 1871, p. 173.—Meek and Wor-  
then Geol. Surv. Ill., V, 1873, p. 596, pl. 29, fig. 1.
42538. *Streptelasma breve* Ulrich. Cotypes.  
Stones River (Ord.). Big Spring, near Fountain, Minne-  
sota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 92, figs. 7a-d.
42557. *Streptelasma parasiticum* Ulrich. Holotype.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 89, fig. 6.
27737. *Streptelasma waynense* (Safford). Plesiotypes.  
34114. Helderbergian (Lower Dev.). Big Sandy River, Benton  
County, Tennessee, and Atoka quadrangle, Indian  
Territory.  
Girty, Nineteenth Ann. Rept. U. S. Geol. Surv., 1900, p. 555.
13791. *Streptorhynchus chemungensis* (Conrad). Plesiotype.  
Middle and Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 117, pl. 13, figs.  
7, 16.  
=Schuchertella chemungensis.  
See Orthotheses chemungensis.
14313. *Streptorhynchus crenistria* (Phillips). Plesiotype.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 279, pl. 18, fig. 14.  
=Orthotetes keokuk.
14221. *Streptorhynchus equivalvis* and *inequalis* Hall and Whit-  
field. Plesiotypes.  
Waverly (Miss.). Ogden and Logan Canyon, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 252 (as *equivalvis*), pl. 4, figs. 1, 2 (as *inequalis*).  
=Schuchertella inequalis.  
See Orthotheses inæqualis.



14228. **Streptorhynchus inflatus** White and Whitfield. Plesiotypes.  
Waverly (Miss.). Dry Canyon, Oquirrh Mountains, Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 252, pl. 4, fig. 3.  
=Schuchertella inflatus.  
See Orthotheses inflatus.
17274. **Streptorhynchus minor** Walcott. Cotype.  
Upper Pogonip (Ord.). Lone Mountain, near Eureka,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 75, pl. 11, fig. 9.  
=Strophomena ? minor.
44994. **Streptorhynchus ulrichi** Hall and Clarke. Holotype.  
Chester (Miss.). Two miles east of Scottsburg, Kentucky.  
Hall and Clarke, Nat. Hist. New York, Pal. VIII, Pt. I, 1892,  
pp. 268, 351, pl. 11 B, fig. 15.
46572. **Streptospongia labyrinthica** Ulrich. Holotype.  
Richmond (Ord.). Near Lebanon, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 236, fig. 8; p. 244.
35406. **Stromatocerium pustulosum** Safford. Plesiotype.  
Trenton (Ord.). Columbia, Tennessee.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 23, 24.
43614. **Stromatotrypa ovata** Ulrich. Cotypes and figured sections.  
Black River (Ord.). Minneapolis, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 302, pl. 24, figs. 24-31.
111657. **Strombina (Amycla) lævis** Whitfield. Cotype.  
Miocene. Jericho and Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 111, pl. 20,  
figs. 1-4.
113713. **Strombina mira** Dall. Holotype.  
Oligocene. Isthmus of Darien.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 312, pl. 29, fig. 7.
113784. **Strombinella acuformis** Dall. Holotype.  
Oligocene. Potrero, Rio Amina, Santo Domingo, West  
Indies.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 312, pl. 29, fig. 6.
11431. **Strombus albirupianus** Dall. Cotypes.  
Jacksonian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 174,  
pl. 12, figs. 2, 10.
112226. **Strombus aldrichi** Dall. Cotypes.  
Oligocene. West of Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 175,  
pl. 12, figs. 1, 4.



112227. **Strombus chipolana** Dall. Cotypes  
Oligocene. Near Baileys Ferry, Chipola River, Florida  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
176, pl. 4, fig. 1; Pt. II, 1892, p. 263, pl. 13, figs. 1, 3 (as  
*S. chipolanus*).
25675. **Stropheodonta beckii** Hall. Plesiotype  
Helderbergian (Lower Dev.). Cape Leidy, Arctic America  
Meek, Amer. Journ. Sci. (2), XL, 1865, p. 33.
13797. **Stropheodonta calvini** Miller. Plesiotype  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 122, pl. 13, fig. 6.
14010. **Stropheodonta canace** Hall and Whitfield. Plesiotype  
Upper Devonian. Treasure Hill, White Pine District,  
Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 246, pl. 3, figs. 1-3.
13799. **Stropheodonta demissa** (Conrad). Plesiotype  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 118, pl. 2, figs.  
9-9b.  
See *Stropheodonta dimosa* and *Strophomena* (*Stropheo-*  
*donta*) *subdemissa*.
17917. **Stropheodonta dimosa** (Conrad). Plesiotype  
Middle Devonian. Near New Buffalo, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3, fig.  
14.  
= *Stropheodonta demissa*.
25676. **Stropheodonta headleyana** Hall. Plesiotype  
Helderbergian (Lower Dev.). Cape Leidy, Arctic America  
Meek, Amer. Journ. Sci. (2), XL, 1865, p. 33.  
= *Strophonella headleyana*.
13804. **Stropheodonta inequiradiata** (Hall). Plesiotype  
Middle Devonian. Combs Peak, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 120, pl. 2, figs.  
11, 11a.
17916. **Stropheodonta iowensis** (Owen). Plesiotype  
Middle Devonian. North of Iowa City, Iowa.  
Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3, fig.  
17 (as *Chonetes* sp. undet.).  
See *Chonetes* (?) *iowensis*.
5082. **Stropheodonta magnifica** Hall. Plastotype  
Oriskany (Lower Dev.). Albany County, New York.  
Hall, Nat. Hist. New York, Pal. III, 1859, p. 414, pl. 94, figs.  
2c, 2d.



13796. **Stropheodonta perplana** (Conrad). Plesiotype.  
Middle and Upper Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 120, pl. 13, fig. 11.  
= **Stropheodonta** (**Leptostrophia**) **perplana**.
13802. **Stropheodonta punctulifera** (Conrad). Plesiotype.  
Middle Devonian. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 121, pl. 13, fig. 10.  
= **Strophonella** **punctulifera**.
111972. **Strophia** (**Eostrophia**) **anodonta** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 13,  
pl. 1, figs. 8c, 8d.
111975. **Strophia** (**anodonta** var.?) **floridana** Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 13,  
pl. 1, fig. 6.
- Strophodonta**. See **Stropheodonta**.
8548. **Strophomena filitexta** (Hall). Plesiotypes.  
Richmond (Ord.). Silver City, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 69, pl. 4, fig. 8.  
= **Strophomena incurvata**.
17223. **Strophomena fontinalis** White. Cotypes.  
Middle Ordovician. Fish Spring, House Range, Utah.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 8 vo.,  
1874, p. 10; Rept. U. S. Geogr. Surv. W. 100th Merid., IV,  
Pt. I, 1877, p. 54, pl. 3, figs. 4a-4c.  
= **Orthis** (**Plæsiomya**) **fontinalis**.
17220. **Strophomena nemea** Hall and Whitfield. Cotypes.  
Upper Pogonip (Ord.). Pogonip Mountain, White Pine  
District, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV,  
Pt. II, 1877, p. 233, pl. 1, fig. 15.—Walcott, Mon. VIII, U.  
S. Geol. Surv., 1884, p. 71.  
[This is an orthoid near *Dalmanella subæquata* and may be a  
large specimen of *D. pogonipensis* (Hall and Whitfield).]
35407. **Strophomena planoconvexa** Hall. Plesiotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Hayes and Ulrich, U. S. Geol. Surv., Folio 95, 1903, illustration  
sheet, figs. 18, 19.
14222. **Strophomena rhomboidalis** (Wilckens). Plesiotypes.  
Waverly (Miss.). Dry Canyon, Oquirrh Mts., Utah.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 253, pl. 4, fig. 4.  
= **Leptæna rhomboidalis**.



8527. *Strophomena rhomboidalis* (Wilckens). Plesiotype  
Lower Carboniferous. Mountain Spring, Old Mormon  
Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 187  
p. 85, pl. 5, fig. 5.  
= *Leptaena rhomboidalis*.
24420. *Strophomena* (*Strophodonta*) *subdemissa* Hall. Plesiotype  
Base of Upper Devonian. Clear Water River, Mackenz  
River Basin, Canada.  
Meek, Trans. Chicago Acad. Sci., I, 1868, p. 88, pl. 13, figs. 7a-  
= *Stropheodonta demissa*.
35363. *Strophostylus remex* White. Plesiotype  
35364. Rico (Upper Carb.). Scotch Creek and Marguerite Creek  
Rico quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 463, pl. 11  
figs. 4, 4a, 5-5b.
35365. *Strophostylus subovatus* Worthen? Plesiotype  
Hermosa (Upper Carb.). Sandstone Mountain, Rico  
quadrangle, Colorado.  
Girty, Prof. Pap. No. 16, U. S. Geol. Surv., 1903, p. 463, pl. 11  
figs. 3, 3a.
45999. *Strophostylus textilis* Ulrich and Scofield. Cotypes  
to Black River (Ord.). St. Paul, Fillmore County, near  
46002. Cannon Falls, and Chatfield, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Fin-  
Rept., III, Pt. II, 1897, p. 1064, pl. 82, figs. 49-54.
43296. *Strotopora dermatata* Ulrich. Holotype  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 488, pl. 77, figs. 8-8a.
43295. *Strotopora perminuta* Ulrich. Cotypes  
Onondaga (Dev.). Falls of the Ohio.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 487, pl. 47, figs. 4-4b.
46573. *Strotopospongia maculosa* Ulrich and Everett. Figures  
sections of holotype  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Everett, Geol. Surv. Ill., VIII, 1890, p. 277, pl. 8, figs.  
1c-1d.
25673. *Stylonurus excelsior* Hall. Plesiotype  
Catskill (Upper Dev.). Meshoppen, Wyoming County  
Pennsylvania.  
Hall and Clarke, Nat. Hist. New York, Pal. VII, 1888, p. 8  
pl. 26A, figs. 1-3.  
See *Dolichocephala lacoana*.



158273. *Stylophora minutissima* Vaughan. Holotype.  
Upper Oligocene. Russell Springs, Flint River, Georgia.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 131, pl. 13,  
figs. 13-15.
158274. *Stylophora ponderosa* Vaughan. Cotypes.  
158275. Lower Oligocene. Salt Mountain, south of Jackson,  
Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 132, pl. 13,  
fig. 16; pl. 14, figs. 1-1b.
163898. *Submarginula retiporosa* Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl.  
55, fig. 3; pl. 60, fig. 17.
46003. *Subulites beloitensis* Ulrich and Scofield. Holotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1072, pl. 81, figs. 9-11.
46004. *Subulites canadensis* Ulrich. Holotype.  
Black River (Ord.). Ottawa, Canada.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt.  
II, 1897, p. 1071, pl. 81, fig. 3.
46005. *Subulites conradi* Ulrich and Scofield. Holotype.  
Stones River (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1071, pl. 81, figs. 4, 5.
46006. *Subulites dixonensis* Ulrich and Scofield. Holotype.  
Stones River (Ord.). Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1071, pl. 81, figs. 6-8.
46007. *Subulites elongatus* Conrad? Plesiotype.  
Trenton (Ord.). Ottawa, Canada.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, pl. 81, figs. 1, 2.
46075. *Subulites nanus* Ulrich. Holotype.  
Stones River (Ord.). Lebanon, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1072, pl. 81, figs. 18, 19.
46008. *Subulites parvus* Ulrich. Holotype.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1072, pl. 81, figs. 16, 17.
46009. *Subulites pergracilis* Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. II, 1897, p. 1072, pl. 81, figs. 12-15.



46010. **Subulites regularis** Ulrich. Cotypes.  
Stones River (Ord.). High Bridge, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1072, pl. 81, fig. 35; pl. 82, figs. 47, 48.
9008. **Succinea (Brachyspira) papillispira** White. Holotype and  
plastotype.  
Green River (Eocene). Alkali Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 45, pl. 19, fig. 4a; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 457, pl. 29, fig. 26.
111635. **Surcula parva** (Conrad)? Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 117, pl. 21,  
fig. 1.
6067. **Sycotypus elongatus** Gill. Holotype.  
Miocene. North Carolina.  
Gill, Amer. Journ. Conch., Phila., III, 1867, p. 150, text fig.  
[Probably=*Fulgur pyrum* var. *excavatum* (Conrad). See Dall  
Trans. Wagner Free Inst. Sci. Phila., III, 1890, p. 112.]
24648. **Symphysurus? goldfussi** Walcott. Holotype.  
Upper Pogonip (Ord.). McCoys Ridge, Eureka District,  
Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 95, pl. 12, fig. 16.
39938. **Synbathocrinites granulatus** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
39939. **Synbathocrinites tennesseæ** Troost. Chirotypes.  
Silurian. Decatur County, Tennessee.  
Troost, Proc. Amer. Assoc. Adv. Sci., II, 1850, p. 61.
347. **Syncyclonema rigida** (Hall and Meek). Cotypes.  
Fox Hills (Cret.). Cheyenne and Moreau Rivers, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 27, pl. 16, figs.  
5a, 5b.
12272. **Syncyclonema rigida** (Hall and Meek). Plesiotypes.  
Cretaceous. Forks of Cheyenne River, Black Hills, South  
Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1881,  
p. 383, pl. 7, fig. 1.
111589. **Syndosmya? nuculoides** (Conrad). Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 81, pl. 15,  
figs. 7-9.



6528. **Synocladia biserialis** Swallow. Plesiotypes.  
Upper Carboniferous. Nebraska City, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Nebr. (Hayden), 1872, p. 156,  
pl. 7, figs. 5a-5e.  
=Septopora biserialis.
8512. **Synocladia biserialis** Swallow. Plesiotypes.  
Red Wall (Upper Carb.). Camp Apache, Navajo County,  
Arizona.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 107, pl. 7, figs. 3a, 3b.  
=Septopora biserialis.
25511. **Syntomostylus rudis** Scudder. Holotype.  
Older Tertiary. Roan Mountains, western Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 50, pl. 9, fig. 10.
1006. **Syntrilasma hemiplicata** (Hall). Plesiotypes.  
6907. Upper Carboniferous. Vermillion Creek, Kansas, near  
15731. Nebraska City, and twelve miles west of Vandalia,  
Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p.  
177, text figs. 7a-7c, 8a, 8b; pl. 6, figs. 1a, 1b.  
=Enteleles hemiplicata.
46574. **Syringolasma wortheni** Ulrich. Figured sections of  
holotype.  
Hamilton (Dev.). Thunder Bay, Michigan.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 250, pl. 7, fig. 4b.  
Syringophyllum wortheni Ulrich=Syringolasma wortheni.
35161. **Syringopora aculeata** Girty. Holotype.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yel-  
lowstone National Park.  
Girty, Mon. XXIII, Pt. II, U. S. Geol. Surv., 1899, p. 509, pl.  
67, figs. 5a, 5b.
6977. **Syringopora multattenuata** McChesney. Plesiotypes.  
Upper Carboniferous. Four miles above mouth of Platte  
River, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p.  
144, pl. 1, figs. 5a-5d.
24547. **Syringopora occidentalis** Meek. Holotype.  
Upper Carboniferous. Southwest of Bald Mountain, Uinta  
Range, Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 50,  
pl. 6, figs. 2, 2a (named at end of description).
35160. **Syringopora surcularia** Girty. Cotypes.  
Madison (Miss.). Crowfoot Ridge, Gallatin Range, Yel-  
lowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 510, pl.  
67, figs. 4a, 4b.



14230. **Syringothyris carteri** (Hall). Plesiotypes.  
35190. Lower Carboniferous. Treasure Hill, White Pine Mountains, Nevada. Madison (Miss.). Yellowstone National Park.  
Girty, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 558, pl. 71, figs. 1a-1c.  
See *Spirifer* (*Syringothyris*) *cuspidatus*.
40878. **Tæniaster elegans** Miller. Cotypes.  
Richmond (Ord.). Waynesville, Ohio.  
Miller, Journ. Cincinnati Soc. Nat. Hist., V, 1882, p. 41, pl. 1, figs. 6-6c.
43799. **Tæniodictya frondosa** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Keokuk, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 529, pl. 69, figs. 5-5c.
43496. **Tæniodictya interpolata** Ulrich. Holotype.  
Waverly (Miss.). Richfield, Ohio.  
Ulrich, Bull. Denison Univ., IV, 1888, p. 80, pl. 13, figs. 9, 9a.
43800. **Tæniodictya ramulosa** Ulrich. Cotypes and figured sections.  
Keokuk (Miss.). Nauvoo, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 528, pl. 67, figs. 1a-11.
43362. **Tæniodictya subrecta** Ulrich. Holotype.  
St. Louis (Miss.). Elizabethtown, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 520, pl. 67, figs. 4-4d.
43360. **Tæniopora occidentalis** Ulrich. Cotypes and figured sections.  
Middle Devonian. Buffalo, Iowa.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 505, pl. 42, figs. 3-3c.
44091. **Tæniopora penniformis** Nicholson. Plesiotypes and figured sections.  
Hamilton (Dev.). Eighteen Mile Creek, New York.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 505, pl. 42, fig. 3d.
198. **Tancredia ? æquilateralis** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 183; Pal. Upper Mo., Smithsonian Cont. to Knowl. No. 172, XIV, 1864, p. 96, pl. 3, fig. 8.
186. **Tancredia americana** (Meek and Hayden). Holotype and  
2017. paratypes.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 142, pl. 35, figs. 1b-e.  
See *Hettangia americana*.



12321. **Tancredia bulbosa** Whitfield. Cotypes.  
12328. Jurassic. East of Belle Fourche River, near Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 370, pl. 6, figs. 1-3.
8072. **Tancredia ? cœlionotus** White. Cotypes.  
Fox Hills (Cret.). Ten miles west of Greeley, Colorado.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 288, pl. 5, figs. 2a-d.
12282. **Tancredia corbuliformis** Whitfield. Cotypes.  
12328. Jurassic. East of Belle Fourche River, near Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 370, pl. 6, figs. 5-8.
8176. **Tancredia extensa** White. Cotypes.  
Jurassic. North side of Bull Lake Fork, Southeastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 150, pl. 38, fig. 4a.
12338. **Tancredia ? inornata** (Meek and Hayden). Plesiotypes.  
12341. Jurassic. East of Belle Fourche River, near Bear Lodge Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 368, pl. 6, figs. 9-13.
28938. **Tancredia ? knowltoni** Stanton. Holotype.  
Jurassic. Sentinel Butte, Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 621, pl. 73, fig. 6.
12321. **Tancredia postica** Whitfield. Holotype.  
Jurassic. East of Belle Fourche River, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 371, pl. 6, fig. 14.
204. **Tancredia warrenana** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1860, p. 183; Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV, 1864, p. 96, pl. 3, fig. 7.
12326. **Tancredia warrenana** Meek and Hayden. Plesiotypes.  
Jurassic. Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880, p. 372, pl. 6, fig. 4.
22890. **Tapes cyrimeriformis** Stanton. Cotypes.  
Colorado (Cret.). Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 106, pl. 24, figs. 1-6.



1847. **Tapes diversum** Sowerby. Plesiotype.  
Post-Tertiary. San Pedro, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean.  
V, 1856, p. 324, pl. 4, figs. 31, 31b.
8028. **Tapes hilgardi** Shumard. Plesiotypes.  
Eagle Ford ? (Cret.). Bell County, Texas.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 22, pl. 16, figs. 3b, 3c.
13341. **Tapes inezensis** Conrad. Holotype.  
Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 7, fig. 1.
13321. **Tapes montana** Conrad. Holotype.  
Miocene. San Buenaventura, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 192, pl. 5, figs. 3-5.
1939. **Tapes wyomingensis** Meek. Cotypes.  
Fox Hills (Cret.). Mouth of Deer Creek on North Platte  
River, Wyoming.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 310.  
= Baroda wyomingensis.
25657. **Tarphyceras champlainense** (Whitfield). Plesiotypes.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 438, pl. 4, figs.  
4-11.
25656. **Tarphyceras macdonaldi** Hyatt. Holotype.  
Beekmantown (Ord.). Near Lexington, Virginia.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 435.
46312. **Technophorus filistriatus** Ulrich. Holotype.  
Black River (Ord.). Six miles south of Cannon Falls  
Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 101, pl. 7, figs. 11, 12; Geol. and  
Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 614,  
pl. 40, figs. 35, 36.
46313. **Technophorus punctostriatus** Ulrich. Cotypes.  
Lorraine (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 685, pl. 47, figs. 10-12.
46314. **Technophorus subacutus** Ulrich. Plastotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich, Amer. Geol., X, 1892, p. 101, pl. 7, figs. 13, 14; Geol. and  
Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 614,  
pl. 40, figs. 33, 34.



46315. **Technophorus yoldiiformis** (Ulrich). Holotype and  
plesiotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. Surv. Ohio, VII, 1893, p. 685, pl. 47, figs. 13, 14.  
See *Nuculites yoldiaformis*.
25350. **Teganium subsphæricum** (Walcott). Plesiotypes.  
Utica (Ord.). Near Holland Patent, New York.  
Rauff, Palaeontographica, XL, 1894, p. 256, pl. 4, figs. 3, 4.  
= *Sphærodictya subsphærica*.
163685. **Teinostoma (Climacia) calliglyptum** Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, pl.  
60, figs. 1-3.
113100. **Teinostoma caloosaëense** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
413, pl. 23, fig. 8.
113101. **Teinostoma chipolanum** Dall. Cotypes.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
413, pl. 23, figs. 6, 7.
112651. **Teinostoma collinus** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
416, pl. 23, fig. 14.
114445. **Teinostoma (Solariorbis) duplinense** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1893, p.  
922, pl. 27, fig. 21.
112652. **Teinostoma funiculus** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
417, pl. 23, fig. 15.
113108. **Teinostoma microforatis** Dall. Cotypes.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
415, pl. 23, figs. 9, 10.
113098. **Teinostoma milium** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
413.



113104. **Teinostoma opsitelotus** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson.  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
414, pl. 19, figs. 5, 5b.
112653. **Teinostoma pseudadeorbis** Dall. Holotype.  
Miocene. Temple Place, near Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
417, pl. 23, figs. 12, 13.
112649. **Teinostoma steiratum** Dall. Holotype.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
415, pl. 23, fig. 11.
135894. **Tellina (Angulus) acalypta** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1027, pl. 47, fig. 12.
114665. **Tellina (Moerella) acloneta** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1025, pl. 46, fig. 16.
114668. **Tellina (Angulus) acosmita** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1026, pl. 46, fig. 1.
135699. **Tellina (Merisca?) acrocasmia** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1020, pl. 46, fig. 10.
135896. **Tellina (Angulus) agria** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1027, pl. 46, fig. 11.
90948. **Tellina (Moerella?) aldrichi** Dall. Holotype.  
Chickasawan (Eocene). Lisbon, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1017, pl. 46, fig. 9.
3849. **Tellina arctata** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 725, Atlas, p.  
18, figs. 3, 3a.  
= *Macoma arctata*.
7916. **Tellina (Oudardia) buttoni** Dall. Holotype.  
Pleistocene. San Diego, California.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1901,  
p. 1036, pl. 47, fig. 18.



157897. **Tellina (Scissula) calliglypta** Dall. Holotype.  
Pliocene. Shell Creek, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1036, pl. 47, fig. 1.
157859. **Tellina (Merisca) caloosana** Dall. Holotype.  
Pliocene. Fort Thompson, Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1030, pl. 47, fig. 2.
114596. **Tellina chipolana** Dall. Holotype.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1018, pl. 47, fig. 6.
114667. **Tellina (Macaliopsis) cloneta** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1020, pl. 46, fig. 8.
1849. **Tellina congesta** Conrad. Cotype.  
Miocene. Monterey, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 323, pl. 3, figs. 21, 21a.  
= *Macoma congesta*.
154537. **Tellina cynoglossa** Dall. Holotype.  
Chickasawan (Eocene). Woods Bluff, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1017, pl. 46, fig. 27.
157860. **Tellina (Merisca) dinomera** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1031, pl. 47, fig. 19.
107391. **Tellina (Phyllodina) dodona** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1023, pl. 30, fig. 7.
115040. **Tellina (Angulus) dupliniana** Dall. Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1032, pl. 46, fig. 17.
179. **Tellina equilateralis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 82.
179. **Tellina (Peronæa ?) equilateralis** (Meek and Hayden).  
Holotype and paratype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 196, pl. 39, figs.  
5a-c.



137391. **Tellina (Angulus) eutænia** Dall. Holotype.  
 Claibornian (Eocene). Claiborne, Alabama.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1016, pl. 46, fig. 2.
396. **Tellina ? formosa** Meek and Hayden. Holotype.  
 Fox Hills (Cret.). Twenty miles below Cannon Ball  
 River, on the Missouri, North Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1860, p. 179.  
 = *Linearia ? formosa*.
188. **Tellina gracilis** Meek and Hayden. Holotype.  
 Fox Hills (Cret.). Mouth of Judith River, Montana.  
 Meek and Hayden, Proc. Acad. Sci. Phila., VIII, 1856, p. 82.  
 = *Thracia gracilis*.
157856. **Tellina (Merisca ?) halidona** Dall. Holotype.  
 Oligocene. Ballast Point, Tampa Bay, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
 p. 1021, pl. 38, figs 3, 3a.
135704. **Tellina (Phyllodina) halistrepta** Dall. Holotype.  
 Oligocene. Bowden, Jamaica.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
 p. 1023, pl. 47, fig. 17.
135696. **Tellina (Moerella) hendersoni** Dall. Holotype.  
 Oligocene. Bowden, Jamaica.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
 p. 1024, pl. 46, fig. 5.
157836. **Tellina hornii** Gabb ? Plesiotype.  
 Lower Tejon (Eocene). One mile southeast of Lower  
 Lake, Lake County, California.  
 Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1877,  
 p. 1043, pl. 65, fig. 5.
114597. **Tellina (Merisca) hypolispa** Dall. Holotype.  
 Oligocene. Alum Bluff, Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
 p. 1022, pl. 46, fig. 23.
7851. **Tellina ? isonema** Meek. Cotype.  
 Colorado (Cret.). Chalk Creek, above Coalville, Utah.  
 Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 15,  
 pl. 15, fig. 6.—Stanton, Bull. No. 106, U. S. Geol. Surv., 1883,  
 p. 113, pl. 25, fig. 8.
114600. **Tellina (Scissula) lampra** Dall. Holotype.  
 Oligocene. Alum Bluff, Calhoun County, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., Pt. V, 1900, p. 1022,  
 pl. 46, fig. 14.



106923. **Tellina (Phyllodina) lepidota** Dall. Holotype.  
Oligocene. Near Gatun, Isthmus of Darien.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1022, pl. 46, fig. 18.
115045. **Tellina (Angulus) macilenta** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1034, pl. 46, fig. 20.
157848. **Tellina (Macaliopsis?) merula** Dall. Holotype.  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1019, pl. 46, fig. 4.
7852. **Tellina modesta** Meek? Plesiotype.  
Colorado (Cret.). East Canyon Creek, Wasatch Range,  
Utah.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 157,  
pl. 15, fig. 5.
22892. **Tellina modesta** Meek. Plesiotype.  
Colorado (Cret.). Coalville, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 111, pl. 25,  
fig. 3.
1913. **Tellina nitidula** Meek and Hayden. Holotype and paratype.  
Montana (Cret.). Deer Creek near North Platte, Wyo-  
ming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 443.  
= *Macra* (*Cymbophora*?) *nitidula*.
157871. **Tellina (Moerella) nucinella** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1026, pl. 46, fig. 19.
135706. **Tellina (Angulus) pharcida** Dall. Holotype.  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1025, pl. 46, fig. 7.
114664. **Tellina (Angulus) pressa** Dall. Holotype.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1026, pl. 47, fig. 5.
144856. **Tellina (Angulus) propetenella** Dall. Holotype.  
Miocene. Three miles above Yorktown, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1033, pl. 46, fig. 6.



144856. **Tellina (Angulus) propeteneri** Dall. Holotype  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
p. 1035, pl. 47, fig. 7.
189. **Tellina prouti** Meek and Hayden. Holotype  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 5  
= *Thracia* ? *prouti*.
135893. **Tellina (Eurytellina) roburina** Dall. Holotype  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1031  
pl. 47, fig. 9.
146186. **Tellina (Eurytellina) scapha** Dall. Holotype  
Miocene. Near Suffolk, Virginia.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1032  
pl. 47, fig. 16.
439. **Tellina scitula** Meek and Hayden. Holotype  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 5
439. **Tellina (Peronæa ?) scitula** (Meek and Hayden). Holotype  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 197, pl. 3  
figs. 1a, 1b.
135707. **Tellina (Scissula) scitula** Dall. Holotype  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1032  
pl. 47, fig. 15.
135698. **Tellina (Merisca) sclera** Dall. Holotype  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1032  
pl. 49, fig. 5.
157847. **Tellina segregata** Dall. Holotype  
Oligocene. Ballast Point, Tampa Bay, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1031  
pl. 37, figs. 7, 8.
135697. **Tellina (Moerella) simpsoni** Dall. Holotype  
Oligocene. Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1032  
pl. 46, fig. 12.
114659. **Tellina strophia** Dall. Holotype  
Oligocene. Macdonald's Farm, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1031  
pl. 47, fig. 11.



441. **Tellina subelliptica** Meek and Hayden. Holotype and paratypes.  
Laramie (Cret.). Cherry Creek, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 83.  
= *Corbicula subelliptica*.
157872. **Tellina (Moerella) suberis** Dall. Holotype.  
Pliocene. Caloosahatchie River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1031, pl. 46, fig. 25.
7904. **Tellina subscitula** Meek. Holotype.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 310; Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 195, pl. 2, figs. 11a, 11b (as *T. (Æne?) subscitula*).
185. **Tellina subtortuosa** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 272.  
= *Thracia?* *subtortuosa*.
115042. **Tellina (Angulus) umbra** Dall. Holotype.  
Miocene. Magnolia, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p. 1033, pl. 46, fig. 13.
46126. **Tellinomya cingulata** Ulrich. Holotype.  
Richmond (Ord.). Marble Hill, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., II, 1879, p. 23, pl. 7, figs. 19, 19a.  
= *Ctenodonta cingulata*.
46128. **Tellinomya compressa** Ulrich. Holotype.  
Black River (Ord.). Five miles south of Cannon Falls, Minnesota.  
Ulrich, Nineteenth Ann. Rept. Geol. and Nat Hist. Surv. Minn., 1892, p. 216, fig. 2.  
= *Ctenodonta compressa*.
17284. **Tellinomya contracta** (Salter)? Plesiotype.  
Upper Pogonip (Ord.). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 76, pl. 11, figs. 15, 15a.  
= *Ctenodonta contracta*.
17286. **Tellinomya? hamburgensis** Walcott.  
Upper Pogonip (Ord.). Ridge east of Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 76, pl. 11, fig. 1a.  
= *Ctenodonta hamburgensis*.



46134. **Tellinomya intermedia** Ulrich. Cotypes.  
 Trenton (Ord.). Near Wykoff, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 218, fig. 4.  
 = *Ctenodonta intermedia*.
46135. **Tellinomya longa** Ulrich. Holotype.  
 Black River (Ord.). Eight miles south of Cannon Falls,  
 Minnesota.  
 Ulrich, Amer. Geol., X, 1892, p. 103, pl. 7, figs. 17, 18.  
 = *Ctenodonta longa*.
46140. **Tellinomya nasuta** Hall. Cotype.  
 Black River (Ord.). Paquettes Rapids, Ottawa River,  
 Canada.  
 Hall, Tenth Rept. N. Y. State Cab. Nat. Hist., 1857, p. 183, text  
 figs. 1, 3.  
 = *Ctenodonta nasuta robusta*.
46141. **Tellinomya nitida** Ulrich. Cotypes.  
 Black River (Ord.). Minneapolis, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 215, fig. 1.  
 = *Ctenodonta nitida*.
46146. **Tellinomya planodorsata** Ulrich. Holotype.  
 Black River (Ord.). Cannon Falls, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 217, fig. 3.  
 = *Ctenodonta planodorsata*.
15070. **Tellinomya protensa** Hall. Holotype.  
 Upper Carboniferous. Near La Bonté, Laramie County,  
 Wyoming.  
 Hall, Stansbury's Expl. and Surv. Valley Great Salt Lake, Utah  
 1852, p. 412, pl. 2, fig. 3.
46147. **Tellinomya recurva** Ulrich. Cotypes.  
 Richmond (Ord.). Near Spring Valley, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 221, fig. 7.  
 = *Ctenodonta recurva*.
46152. **Tellinomya similis** Ulrich. Cotypes.  
 Richmond (Ord.). Spring Valley, Minnesota.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 220, fig. 6.  
 = *Ctenodonta similis*.
46157. **Tellinomya subrotunda** Ulrich. Holotype.  
 Black River (Ord.). Mercer County, Kentucky.  
 Ulrich, Nineteenth Ann. Rept. Geol. and Nat. Hist. Surv. Minn.,  
 1892, p. 219, fig. 5.  
 = *Ctenodonta subrotunda*.



23868. **Temnocheilus crassus** Hyatt. Holotype.  
Upper Carboniferous. Near Oswego, Kansas.  
Hyatt, Second Ann. Rept. Geol. Surv. Tex., 1891, p. 331, text  
figs. 27-29.
23867. **Temnocheilus depressus** Hyatt. Holotype.  
Upper Carboniferous. Near Oswego, Kansas.  
Hyatt, Second Ann. Rept. Geol. Surv. Tex., 1891, p. 331, text  
figs. 25, 26.
38119. **Tenillus firmus** Scudder. Holotype.  
Florissant (Oligocene). Florissant, Colorado.  
Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 35, pl. 8, fig. 8.
24313. **Tentaculites oseryi** Clarke. Cotypes.  
Middle Devonian. Rio Curua, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 44.
30211. **Terebellina palachei** Ulrich. Cotypes.  
30212. Lias? Woody and Pogibshi Islands, Kadiak, Alaska.  
Ulrich, Harriman Alaska Exped., IV, 1904, p. 132, pl. 11, figs. 1-7.
113755. **Terebra (Acus) amitra** Dall. Holotype.  
Oligocene. Potrero, River Amina, Santo Domingo, West  
Indies.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 39; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 19.
113653. **Terebra (Acus) bipartita** Sowerby. Plesiotypes.  
113910. Oligocene. Ponton, Santo Domingo, West Indies, and  
Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 38.
113752. **Terebra (Acus) bipartita cirrus** Dall. Cotypes.  
Oligocene. River Amina, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 38; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 28.
113756. **Terebra (Acus) bipartita oligomitra** Dall. Cotypes.  
Oligocene. River Amina, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 38; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 29.
113654. **Terebra (Acus) bipartita spirifera** Dall. Cotypes.  
Oligocene. Ponton, Santo Domingo, West Indies.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 38; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 13.
113912. **Terebra (Acus) chippola** Dall. Holotype.  
Chippola (Oligocene). Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 38; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 13.
111648. **Terebra curvifrons** Ulrich. Holotype.  
Miocene. Whitfield, Mo.  
figs. 14-17.



106952. **Terebra (Acus) curvilineata** Conrad. Plesiotypes.  
 111648. Oligocene. Jericho, New Jersey, and Easton, Maryland.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 36.
106956. **Terebra (Acus) curvilirata** Conrad. Plesiotypes.  
 106957. Miocene. St. Marys River, Maryland.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 37.
113124. **Terebra (Oxymeris) dislocata indenta** Dall. Holotype.  
 Miocene. Duplin County, North Carolina.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 40; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 7.
113751. **Terebra gabbi** Dall. Cotypes.  
 Oligocene. Potrero, River Amina, Santo Domingo, West  
 Indies.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 34; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 31.
113753. **Terebra haitensis** Dall. Holotype.  
 Oligocene. Potrero, River Amina, Santo Domingo, West  
 Indies.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 35; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 30.
6034. **Terebra (Hastula) houstonia** Harris. Cotypes.  
 Eocene. Claiborne, Alabama.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 34.
106953. **Terebra (Hastula) inornata** Dall. Cotypes.  
 106954. Oligocene. Shiloh, New Jersey, and St. Marys River.  
 106955. Maryland.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 35.
113913. **Terebra (Acus) langdoni** Dall. Holotype.  
 Chipola (Oligocene). Calhoun County, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 39; Trans. Wagner  
 Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 27.
113911. **Terebra (Acus) langdoni perpunctata** Dall. Cotypes.  
 Chipola (Oligocene). Calhoun County, Florida.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 39.
11461. **Terebra (Acus) neglecta** (Emmons). Plesiotypes.  
 Miocene. South Carolina.  
 Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 40.
8919. **Terebra plicifera** Heilprin. Holotype and paratype.  
 Eocene. Atacosa County, Texas.  
 Heilprin, Proc. U. S. Nat. Mus. III, 1880, p.
107389. **Terebra psilis** Dall.  
 Oligocene. Oak Grove, Florida.  
 Dall, Trans. Wagner Free Inst. Sci. Phila.,  
 41, fig. 11.



- 11873a. **Terebra (Acus) sincera** Dall. Cotypes.  
Miocene. St. Marys River, Maryland.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 37.
108495. **Terebratalia hemphilli** Dall. Holotype.  
Pliocene. Santa Barbara, California.  
Dall, Proc. U. S. Nat. Mus. XXIV, 1902, pp. 561, 562, pl. 40, figs. 8, 10.
23021. **Terebratella californica** Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Stephenson's, Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 33, pl. 1, figs. 12, 13.
3597. **Terebratula amygdala** Dana. Cotypes.  
Carboniferous. Black Head, Illawarra, New South Wales, Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 682, Atlas, pl. 1, figs. 2a-2f.  
= *Dielasma?* amygdala.
12548. **Terebratula augusta** Hall and Whitfield. Cotypes.  
Jurassic. Shoshone Springs; Augusta Mountains, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II, 1877, p. 285, pl. 7, figs. 7-10.
1124. **Terebratula bovidens** Morton. Plesiotypes.  
6834. Upper Carboniferous. Indian Creek, Kansas, Rock Bluff  
6943. and Plattsmouth, Nebraska.  
Meek, Final Rept. U. S. Geol. Surv. Neb. (Hayden), 1872, p. 187, pl. 1, figs. 7a-7d; pl. 2, figs. 4a, 4b.  
= *Dielasma* bovidens.
8493. **Terebratula (Dielasma) bovidens** (Morton). Plesiotypes.  
Upper Carboniferous. Near Santa Fé, New Mexico.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 144, pl. 11, figs. 10a-10c.  
= *Dielasma* bovidens.
8535. **Terebratula (Dielasma) burlingtonensis** (White). Plesiotypes.  
Lower Carboniferous. Mountain Spring, Old Mormon Road, Nevada.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876, p. 93.
115645. **Terebratula carneoides** Guppy. Holotype.  
Eocene. San Fernando, Trinidad, British West Indies.  
Guppy, Proc. Zool. Soc. London, XXII, 1866, p. 296, pl. 1.



25642. **Terebratula elongata** Schlotheim. Plesiotypes.  
Carboniferous. District of Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 682, Atlas, pl. 1,  
figs. 3a-d.  
= *Dielasma elongata*.
14350. **Terebratula hastata** Sowerby. Plesiotypes.  
Lower Carboniferous. Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 224, pl. 7, figs.  
7-7b.  
= *Dielasma hastata*.
12533. **Terebratula humboldtensis** Gabb. Cotypes.  
Triassic. Near Dun Glen Pass, Pah-Ute Range, Nevada.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 282, pl. 6, figs. 22-24.
115646. **Terebratula lecta** Guppy. Holotype.  
Eocene. San Fernando, Trinidad, British West Indies.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 296,  
pl. 19, fig. 3.
9837. **Terebratula leonensis** Conrad. Cotypes.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 164, pl. 21, fig. 2.  
= *Kingenia leonensis*.
5121. **Terebratula meridionalis** Conrad. Cotypes.  
Jurassic. Cordillera de Dona Ana, Chile.  
Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 282,  
pl. 42, fig. 10.
9827. **Terebratula mexicana** Hall. Cotypes.  
15067. Carboniferous. Texas.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
pl. 20, figs. 2a-c.  
= *Seminula mexicana*.
3487. **Terebratula nitens** Conrad. Holotype.  
Miocene. Astoria, Oregon.  
Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 726, Atlas, pl.  
19, figs. 1, a.
8190. **Terebratula semisimplex** White. Cotypes.  
Triassic. Five miles west of John Gray's Lake, South-  
eastern Idaho.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 108, pl. 31, figs. 3a-c.



17955. **Terebratula serpentina** de Koninck ? Plesiotype.  
 Kinderhook ? St. Louis ? (Miss.). Skunk River, Iowa.  
 Owen, Rept. Geol. Surv. Wis., Iowa, and Minn., 1852, pl. 3 A,  
 fig. 13.  
 = *Eumetria vera*.
5109. **Terebratula subexcavata** Conrad. Holotype.  
 Jurassic. Cordillera de Dona Ana, Chile.  
 Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 282;  
 pl. 41, fig. 4.
5118. **Terebratula subtetrædra** Conrad. Cotypes.  
 Jurassic. Portezuelo de Mauplas, and Cordillera de Santa  
 Ana, Chile.  
 Conrad, U. S. Naval Ast. Exped. S. Hemisphere, 1855, II, p. 282,  
 pl. 42, fig. 8.
115647. **Terebratula trinitatensis** Guppy. Holotype.  
 Eocene. San Fernando, Trinidad, British West Indies.  
 Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 296, pl.  
 17, figs. 1a, 1b.
15239. **Terebratula utah** Hall and Whitfield. Holotype.  
 Waverly (Miss.). Cottonwood Divide, Wasatch Range,  
 Utah.  
 Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
 1877, p. 258, pl. 4, fig. 18.  
 = *Dielasma utah*.
9838. **Terebratula wacoensis** Roemer. Plesiotypes.  
 Washita (Lower Cret.). Leon Springs, Texas.  
 Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
 p. 147, pl. 3, figs. 1a-c.  
 = *Kingenia wacoensis*.
138055. **Terebratula wilmingttonensis** Lyell and Sowerby. Plesiotypes.  
 Eocene. Wilmington, North Carolina.  
 Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903, p.  
 1537, pl. 58, figs. 14-20.
157828. **Terebratulina tejonensis** Stanton. Cotypes.  
 Lower Tejon (Eocene). One mile southeast of Lower  
 Lake Lake (County, California).  
 Rept. U. S. Geol. Surv., Pt. I, 1897,



422. ***Teredo globosa*** Meek and Hayden. Cotypes.  
 Fox Hills (Cret.). Fort Clark, on the Missouri, North  
 Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1858, p. 53.—  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 264, pl. 30,  
 fig. 13, and text figs. 31, 32.
20107. ***Teredo pugetensis*** White. Cotypes.  
 Puget (Cret.). Carbonado, Washington.  
 White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 62, pl. 8.
421. ***Teredo selliformis*** Meek and Hayden. Paratypes.  
 Fort Pierre or Fox Hills (Cret.). Fort Clark, Missouri  
 River, North Dakota.  
 Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 178;  
 Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 262, pl. 17,  
 fig. 19d.
3481. ***Teredo substriata*** Conrad. Holotype.  
 Miocene. Astoria, Oregon.  
 Conrad, Wilkes U. S. Expl. Exped., X, 1849, p. 728, Atlas, pl. 20,  
 fig. 7.
25479. ***Teretrum quiescitum*** Scudder. Holotype.  
 Older Tertiary. Green River, Wyoming.  
 Scudder, Mon. XXI, U. S. Geol. Surv., 1893, p. 26, pl. 8, fig. 6.
38140. ***Termes* (?) *longitudinalis*** Scudder. Holotype.  
 Upper Coal Measures. Mazon Creek, Grundy County,  
 Illinois.  
 Scudder, Mem. Boston Soc. Nat. Hist., III, 1885, p. 350; Foss.  
 Insects N. America, I, 1890, p. 314.
7526. ***Tessarolax hitzii*** White. Holotype and plastotype.  
 Fort Pierre (Cret.). Near Fort Shaw, near Musselshell  
 River, Montana.  
 White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
 p. 29, pl. 15, fig. 2a.
35063. ***Tetracystis chrysalis*** Schuchert. Holotype.  
 Manlius (Sil.). Near Keyser, West Virginia.  
 Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 218,  
 text fig. 5; pl. 34, figs. 9, 19; pl. 40, figs. 1-3.
35091. ***Tetracystis fenestratus*** (Troost) Schuchert. Holotype.  
 Brownsport (Sil.). Decatur County, Tennessee.  
 Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 219,  
 text fig. 26; pl. 34, figs. 6-8.  
 See *Echinœncrinites fenestratus*.
41385. ***Tetradella lunatifera*** (Ulrich). Plesiotypes.  
 Trenton (Ord.). Cannon Falls, Minnesota.  
 Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
 1894, p. 680, text figs. 51a, 51b, pl. 46, figs. 12-14.



41582. **Tetradella quadrilirata** (Hall and Whitfield). Plesiotypes.  
 41583. Black River (Ord.). Minneapolis, Minnesota.  
 Stones River (Ord.). High Bridge, Kentucky.

Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 678, pl. 46, figs. 1-8.

41584. **Tetradella quadrilirata simplex** (Ulrich). Plesiotype.  
 Black River (Ord.). Fountain, Minnesota.

Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1894, p. 679, pl. 46, fig. 11.

41384. **Tetradella subquadrans** Ulrich. Holotype.  
 Trenton (Ord.). Trenton Falls, New York.

Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 115, text figs. 2a-c.

46011. **Tetranota bidorsata** (Hall). Plesiotype.  
 Trenton (Ord.). Near Cannon Falls, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 877, pl. 65, figs. 10, 11, 13-18.

46012. **Tetranota bidorsata minor** Ulrich and Scofield. Cotypes.  
 Black River (Ord.). St. Paul, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 878.

46013. **Tetranota macra** Ulrich and Scofield. Holotype.  
 Stones River (Ord.). Minneapolis, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 878, pl. 65, figs. 1, 2.

46014. **Tetranota obsoleta** Ulrich and Scofield. Cotypes.  
 46015. Black River (Ord.). Chatfield and Cannon Falls, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 880, pl. 65, figs. 19-23.

46016. **Tetranota sexcarinata** Ulrich and Scofield. Cotypes.  
 46017. Stones River (Ord.). Dixon, Illinois; Minneapolis, Minnesota.  
 46018. Trenton (Ord.). Wykoff, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 878, pl. 65, figs. 3-9.

46019. **Tetranota wisconsinensis** (Whitfield). Plesiotype.  
 Stones River (Ord.). Minneapolis, Minnesota.

Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II, 1897, p. 878, pl. 65, fig. 29.

3366. **Tetranota** Cotypes.  
 Kentucky.

a. 6-6c.



44096. **Thamniscus dubius** (Schlotheim).      Figured sections of  
plesiotype.  
Permian. Poesneck, Germany.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 606, pl. 62, figs. 10, 10a.
43364. **Thamniscus furcillatus** Ulrich.      Cotype.  
Chester (Miss.) Near Chester, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 609, pl. 62, figs. 9, 9b.
43363. **Thamniscus ramulosus** Ulrich.      Cotypes.  
Chester (Miss.) Sloans Valley, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 610, pl. 62, figs. 4-4b.
43801. **Thamniscus ramulosus sevellensis** Ulrich.      Cotypes  
and figured sections.  
Lower Coal Measures. Seville, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 610, pl. 55, fig. 6 (on page  
as *T. sevellensis*).
43365. **Thamniscus sculptilis** Ulrich.      Cotype.  
Keokuk (Miss.) Kings Mountain, Kentucky.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 608, pl. 62, figs. 8, 8b.
2111. **Thaumastus limnæformis** (Meek and Hayden).      Holotype  
and paratypes.  
Laramie (Cret.). Opposite mouth of Yellowstone River,  
North Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 553, pl. 44,  
figs. 8a-d.
1181. **Theca gregaria** (Meek and Hayden).      Cotypes.  
Upper Cambrian. Near head of Powder River, Big Horn  
Mountains, Wyoming.  
Meek and Hayden, Pal., Upper Mo., Smithsonian Cont. to  
Knowl., No. 172, XIV, 1864, p. 5, text figs. a-d.  
= *Hyolithes gregarius*.
1181. **Theca (Pugiunculus) gregaria** Meek and Hayden.      Cotypes.  
Upper Cambrian. Near head of Powder River, Big Horn  
Mountains, Wyoming.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1861, p. 436;  
Am. Journ. Sci. (2), XXXIII, 1862, p. 73, fig. 3.  
= *Hyolithes gregarius*.
3621. **Theca lanceolata** Morris.      Plesiotypes.  
Carboniferous. Black Head, Illawarra, New South Wales,  
Australia.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 708.  
= *Hyolithes lanceolatus*.
155767. **Thecodonta? (Dicranodesma) calvertensis** Glenn.      Plesiotype.  
Miocene. Plum Point, Maryland.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900, p.  
1157, pl. 45, figs. 23, 24.



337. **Thetis ? circularis** (Meek and Hayden). Holotype and  
340. paratypes.  
Fort Pierre (Cret.). Near Black Hills on Cheyenne River,  
South Dakota, and near mouth of Milk River,  
Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 190, pl. 17,  
figs. 8a-c.
12330. **Thetis circularis** (Meek and Hayden). Plesiotypes.  
Fort Pierre (Cret.). Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 417, pl. 11, figs. 22-24.  
See *Venus ? circularis*.
211. **Thracia ? arcuata** Meek and Hayden. Holotype.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 182;  
Pal. Upper Mo., Smithsonian Cont. to Knowl., No. 172, XIV,  
1864, p. 102, pl. 4, fig. 8.
107399. **Thracia dilleri** Dall. Holotype.  
Eocene. Coos Bay, Oregon.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 929, pl. 34, fig. 19; Pt. VI, 1903, p. 1524.
188. **Thracia gracilis** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 224, pl. 39, fig. 6b.  
See *Tellina gracillis*.
28962. **Thracia ? montanaensis** (Meek). Holotype.  
Jurassic. Devil's slide, Cinnabar Mountain, Yellowstone  
River, Montana.  
Stanton, Mon. XXXII, Part II, U. S. Geol. Surv., 1899, p. 628,  
pl. 73, fig. 10.  
[Probably holotype of *Corimya montanaensis* Meek. T. W.  
Stanton.]
8029. **Thracia myæformis** White. Holotype.  
Cretaceous. Bell County, Texas.  
White, Proc. U. S. Nat. Mus., II, 1879, p. 297, pl. 6, figs. 1, 2;  
Twelfth Ann. Rept. U. S. Geol. Surv. Terr., 1883, p. 23, pl. 17,  
figs. 2a, b.
189. **Thracia ? prouti** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 225, pl. 37, figs.  
6a, 6b.  
See *Tellina prouti*.
12253. **Thracia subgracilis** Whitfield. Holotype.  
Fort Pierre (Cret.). Cheyenne River, near French Creek,  
Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 419, pl. 11, figs. 29, 30.



197. **Thracia ? sublævis** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila. for 1860, p. 182;  
Pal. Upper Mo., Smithsonian Contr. to Knowl., No. 172, XIV,  
1864, p. 102, pl. 4, figs. 4, 4a.
12327. **Thracia ? sublevis** Meek and Hayden. Plesiotypes.  
Jurassic. Redwater Valley, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 375, pl. 5, fig. 34 (fig. 24 in error).
185. **Thracia ? subtortuosa** (Meek and Hayden). Holotype.  
Fox Hills (Cret.). Mouth of Judith River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 223, pl. 37, fig. 5.  
See *Tellina subtortuosa*.
28943. **Thracia weedi** Stanton. Cotypes.  
28944. Jurassic. Yellowstone National Park.  
Stanton, Mon. XXXII, Pt. II, U. S. Geol. Surv., 1899, p. 627,  
pl. 75, figs. 1-3.
115424. **Thysanus excentricus** Duncan. Cotypes.  
Miocene. Jamaica, British West Indies.  
Duncan, Quart. Journ. Geol. Soc. London, XIX, 1863, p. 439,  
pl. 16, fig. 3.
38154. **Titanophasma jucunda** Scudder. Holotype.  
Upper Coal Measures. Near Pittston, Pennsylvania.  
Scudder, Proc. Amer. Acad. Arts and Sci., XX, 1885, p. 169.
135675. **Tivela jamaicensis** Dall. Holotype.  
Bowden (Oligocene). Bowden, Jamaica.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1244, pl. 57, fig. 9.
115434. **Tornatella textilis** Guppy. Holotype.  
Oligocene. Jamaica, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 407, pl. 16, fig. 4.
22329. **Tornatellina ? isoclina** White. Cotypes.  
Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 48, pl. 6, figs.  
14, 15.
113871. **Tornatina fischeri** Dall. Cotypes.  
Chipola (Oligocene). Chipola River, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 26; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, fig. 25.
97478. **Tornatina (Cylichnella) gabbi** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 27.  
=*Cylichnella gabbi*.



113867. **Tornatina incisula** Dall. Cotypes.  
Oligocene. Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 25; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 8.
113874. **Tornatina myrmecoön** Dall. Cotypes.  
113875. Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 25; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 18.
112607. **Tornatina persimilis** Dall. Cotypes.  
Chipola (Oligocene). Calhoun County, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 26; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 59, fig. 22.
8163. **Tortacella haldemani** (White). Cotypes and plesiotypes.  
23117. Bear River (Cret.). Twenty miles north of Cokeville,  
Wyoming.  
White, Bull. No. 128, U. S. Geol. Surv., 1895, p. 44, pl. 5,  
figs. 8-12.  
See *Acella haldemani*.
9856. **Toxaster elegans** (Shumard). Plesiotypes.  
Washita (Lower Cret.). Eagle Spring, Texas.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 146, pl. 21, figs. 1a-e.  
= *Epiaster whitei*.
9857. **Toxaster texanus** Roemer. Plesiotype.  
Fredericksburg (Lower Cret.). Leon Springs, Texas.  
Hall, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 145, pl. 1, figs. 2a-c.  
= *Enallaster texanus*.
12529. **Trachyceras judicarium** Mojsisovics. Plesiotypes.  
Triassic. Cottonwood Canyon, West Humboldt Range,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 118,  
pl. 11, figs. 1, a.
20223. **Trachyceras judicarium subasperum** Meek. Holotype.  
Triassic. Cottonwood Canyon, West Humboldt Range,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 118,  
pl. 11, figs. 2-2b.
12527. **Trachyceras whitneyi** (Gabb). Plesiotype.  
Triassic. Cottonwood Canyon, West Humboldt Range,  
Nevada.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 116,  
pl. 11, figs. 3, a.
261. **Trachytriton vinculum** (Hall and Meek). Plesiotypes.  
Fort Pierre (Cret.). Great Bend of Missouri River, South  
Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 304, pl. 19,  
figs. 7a-d.



109231. **Transennella caloosana** Dall. Holotype.  
Pliocene. Caloosahatchie, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1242, pl. 57, fig. 2.
115165. **Transennella carolinensis** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1242, pl. 55, fig. 4.
109230. **Transennella chipolana** Dall. Holotype.  
Chipola (Oligocene). McDonald's ranch, Chipola River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1241, pl. 57, fig. 6.
135890. **Transennella santarosana** Dall. Holotype.  
Oligocene. Oak Grove, Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1241, pl. 57, fig. 13.
114590. **Transennella utica** Dall. Holotype.  
Chipola (Oligocene). McDonald's ranch, Chipola River,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. VI, 1903,  
p. 1240, pl. 57, fig. 12.
12303. **Trapezium bellefourchensis** Whitfield. Cotypes.  
Jurassic. East of Belle Fourche River, near Bear Lodge  
Butte, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources, Black Hills Dakota, 1880,  
p. 364, pl. 5, figs. 1-4.
107794. **Trapezium claibornense** Dall. Holotype.  
Claibornian (Eocene). Claiborne, Alabama.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. V, 1900,  
pl. 43, figs. 9, 10; Pt. VI, 1903, p. 1498.
7846. **Trapezium micronema** Meek. Holotype.  
Colorado (Cret.). Sulphur Creek, Bear River City, Wy-  
oming.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 493.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
p. 293, pl. 10, fig. 5a.  
= Barbatia micronema.
12317. **Trapezium subequalis** Whitfield. Cotypes.  
12329. Jurassic. Red Canyon Creek, Black Hills, South Dakota.  
Whitfield, Rept. Geol. and Resources Black Hills Dakota, 1880,  
p. 365, pl. 5, figs. 5-8.
7813. **Trapezium truncatum** (Meek). Cotypes.  
Cretaceous. Salt Lake, Utah.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 292,  
pl. 10, figs. 6a, 6b.  
See Pachymya ? truncata.



44999. **Trematis crassipuncta** Ulrich. Plastotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Amer. Geol., III, 1889, p. 378, fig. 7; *ibid.*, IV, 1889, p. 22.
45199. **Trematis oblata** Ulrich. Cotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Amer. Geol., III, 1889, p. 378, fig. 9b; *ibid.*, IV, 1889, p. 23.
45200. **Trematis oblata** Ulrich. Plastotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Amer. Geol., III, 1889, p. 378, figs. 9, 9a; *ibid.*, IV, 1889, p. 23.
15331. **Trematis pannulus** White. Holotype.  
Lower Cambrian. Pioche, Nevada.  
White, Prelim. Rept. U. S. Geogr. Surv. W. 100th Merid., 1874, 8vo., p. 6; Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1877, p. 36, pl. 1, figs. 4a, 4b.  
=Iphidea pannula.  
See Kutorgina pannula.
44993. **Trematis umbonata** Ulrich. Plastotype.  
Lorraine (Ord.). Cincinnati, Ohio.  
Ulrich, Amer. Geol., III, 1889, p. 378, fig. 8; *ibid.*, IV, 1889, p. 23.
43803. **Trematopora calloporoides** Ulrich. Cotype and figured sections.  
Cincinnatian (Ord.). Alexander County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 420, pl. 38, figs. 1b, 1c, 1d.
43802. **Trematopora debilis** Ulrich. Figured sections and fragment of holotype.  
Cincinnatian (Ord.). Alexander County, Illinois.  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 419, pl. 34, figs. 3c, 3d.
44107. **Trematopora halli** Ulrich. Cotypes.  
Niagaran (Sil.). Waldron, Indiana.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., VI, 1883, p. 261, pl. 13, figs. 3, 3a.
43778. **Trematopora ? nitida** Ulrich. Cotypes and figured sections.  
Richmond (Ord.). Four miles north of Fayville, Illinois (Savannah, Illinois, in error).  
Ulrich, Geol. Surv. Ill., VIII, 1890, p. 419, pl. 34.  
=Lioclemella nitida.
43615. **Trematopora ? primigenia** Ulrich. C  
Black River (Ord.). Minneapolis, Minn.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Pt. 1, 1893, p. 309, pl. 21, figs. 23-40.



12452. **Trigonia evansana** Meek. Holotype  
Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Trans. Albany Inst., IV, 1857, p. 42.  
See *Trigonia evansi*.
7529. **Trigonia evansi** Meek. Cotype  
12452. Nanaimo (Cret.). Nanaimo, Vancouver Island.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, 1876, p. 35  
pl. 2, figs. 7, 7a.  
=*Trigonia evansana*.
3581. **Trigonia lorentii** Dana. Holotype  
Jurassic. San Lorenzo, Peru, South America.  
Dana, Wilkes U. S. Expl. Exped., X, 1849, p. 721, pl. 15, fig.  
2a, 2c.
7817. **Trigonia montanaensis** Meek. Holotype  
Jurassic. Near Lower Canyon of the Yellowstone River  
Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. 1, 1881,  
p. 147, pl. 38, fig. 2.
12537. **Trigonia quadrangularis** Hall and Whitfield. Holotype  
Jurassic. Near Como, Laramie Plains, Wyoming.  
Hall and Whitfield, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. II,  
1877, p. 293, pl. 7, fig. 22.
9843. **Trigonia texana** Conrad. Holotype  
Fredericksburg (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1851,  
p. 148, pl. 3, figs. 3a-c.  
=*Cyprina?* *texana*.
43596. **Trigonodictya conciliatrix** Ulrich. Cotypes and figure  
sections  
Black River (Ord.). Cannon Falls, Minnesota.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 160, pl. 9, figs. 11, 12; pl. 10, figs. 15-20.
43595. **Trigonodictya eatonensis** Ulrich. Cotype  
Clinton (Sil.). Near Eaton, Ohio.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. I,  
1893, p. 160.
112090. **Trigonostoma subthomasiæ** Dall. Cotype  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 4,  
pl. 11, fig. 3.
97356. **Trigonostoma tenera** Philippi. Plesiotypes  
Pliocene. Caloosahatchie River, near Fort Thompson  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 4,  
pl. 10, fig. 8.



7801. **Trimerella ohioensis** Meek. Holotype.  
Niagara (Sil.). Genoa, Ottawa County, Ohio.  
Meek, Amer. Journ. Sci. (3), I, 1871, p. 305; Pal. Ohio, I, 1873,  
p. 183, pl. 16, figs. 1a-1d.
35064. **Trimerocystis peculiaris** Schuchert. Holotype.  
Manlius (Sil.). Near Keyser, West Virginia.  
Schuchert, Smithsonian Misc. Coll., Quart., XLVII, 1904, pp. 239,  
240, text fig. 34; pl. 35, figs. 1-3.
4910. **Trimerus delphinocephalus** Green. Plastotype.  
Niagara (Sil.). Williamsville, New York.  
Green, Mon. Trilobites N. America, Phila., 1832, p. 82. Cast  
No. 32.  
=Homalonotus delphinocephalus.
4885. **Trimerus jacksonii** Green. Plastotype.  
Hamilton (Dev.). Huntington County, Pennsylvania.  
Green, Amer. Journ. Sci., XXXII, 1837, p. 347. Cast No. 51.  
=Homalonotus jacksoni.
135824. **Trinacria meekii** Dall. Holotype.  
Oligocene. Santa Rosa County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p.  
604, pl. 32, fig. 17.
41876. **Trinucleus bellulus** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., I, 1878, p. 99, pl. 4  
fig. 15.
45545. **Triplecia ulrichi** Winchell and Schuchert. Cotypes.  
Maquoketa (Ord.). Wykoff, Minnesota.  
Winchell and Schuchert, Geol. and Nat. Hist. Surv. Minn., Final  
Rept., III, Pt. I, 1893, p. 409, figs. 34-a-e.
17279. **Triplesia calcifera** (Billings). Plesiotypes.  
17281. Lower Pogonip (Cambrian). Eureka District, Nevada.  
Walcott, Mon. VIII, U. S. Geol. Surv., 1884, p. 75, pl. 11, figs.  
7, 8.  
=Syntrophia calcifera.
35146. **Tripleurocrinus levis** Wood. Holotype.  
Onondaga (Dev.). Le Roy, New York.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 57, pl.  
16, figs. 2, 2a.
46529. **Triptoceras planodorsatum** Whitfield. Plesiotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Clarke, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, F  
II, 1897, p. 792, pl. 56, fig. 4.



111634. **Tritia bidentata** (Emmons). Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 106, pl. 19, fig. 7.
111632. **Tritia trivittatoides** Whitfield. Cotypes.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 104, pl. 19, figs. 1-3.
116644. **Tritia trivittatoides elongata** Whitfield. Cotypes.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 105, pl. 19, figs. 4-6.
27910. **Triticites secalicus** (Say). Plesiotypes.  
Upper Carboniferous. Platte River, near junction with Missouri.  
Girty, Amer. Journ. Sci. (4), XVII, 1904, pp. 234-240, text figs. 1-5.
22920. **Tritonidea? huerfanensis** Stanton. Holotype.  
Colorado (Cret.). Poison Canyon, Huerfano Park, Colorado.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 152, pl. 31, fig. 15.
112055. **Tritonidea pauper** Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 129, pl. 4, fig. 8c.
22919. **Tritonium kanabense** Stanton. Holotype.  
Colorado (Cret.). Upper Kanab Valley, Utah.  
Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 150, pl. 31, fig. 12.
164868. **Trochita alaskana** Dall. Cotypes.  
Miocene. Popof Island, Shumagins, Alaska.  
Dall, Harriman Alaska Exped., IV, 1904, pl. 10, figs. 2, 6.
13310. **Trochita costellata** Conrad. Cotype.  
Miocene. Gaviote Pass, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean VII, 1857, p. 195, pl. 7, fig. 3.  
= *Calyptraea costellata*.
111654. **Trochita perarmata** (Conrad). Plesiotype.  
Miocene. Shiloh and Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 124, pl. 22, figs. 15-19.
156934. **Trochocyathus californianus** Vaughan. Cotypes.  
Eocene? Southern California.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 96.



158161. **Trochocyathus cingulatus** Vaughan. Holotype.  
Chickasawan or Midwayan (Eocene). Prairie Creek, Wilcox County, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 99, pl. 7, figs. 19, 19b.
158159. **Trochocyathus depressus** Vaughan. Cotypes.  
Lower Claibornian (Eocene). Six miles west of De Soto, Clarke County, Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 97, pl. 7, figs. 14-17.
158134. **Trochocyathus hyatti** Vaughan. Cotypes.  
158135. Sucarnochee (Eocene). Black Bluff, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 93, pl. 6, figs. 19-21; pl. 7, fig. 1.
158145. **Trochocyathus lunulitiformis** (Conrad). Plesiotypes.  
158146. Jacksonian (Eocene). Jackson, Mississippi, and Montgomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 94, pl. 7, figs. 2-3.
158152. **Trochocyathus lunulitiformis montgomeriensis** Vaughan. Cotypes.  
to  
158155. Jacksonian (Eocene). Montgomery, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 94, pl. 7, figs. 4, 5-8, 9.
158158. **Trochocyathus stantoni** Vaughan. Holotype.  
Upper Tejon (Eocene). Northeast of Clayton, Contra Costa County, California.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 98, pl. 7, figs. 18, 18a.
158165. **Trochocyathus striatus** (Gabb). Plesiotypes.  
158167. Upper Tejon (Eocene). Near Clayton, Contra Costa County, California.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 101, pl. 7, fig. 24; pl. 8, figs. 1-3.
158169. **Trochocyathus zitteli** (Merriam ms.) Vaughan. Cotypes.  
Martinez (Eocene). Martinez, California.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 102, pl. 8, figs. 4-7.
25659. **Trocholitoceras walcotti** Hyatt. Holotype.  
Beekmantown (Ord.). Fort Cassin, Vermont.  
Hyatt, Proc. Amer. Phil. Soc., XXXII, 1894, p. 480, pl. 6, figs. 12-19.
46021. **Trochonema altum** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minne  
Ulrich, Geol. and Nat. Hist. Surv. Min  
1897, p. 1052, pl. 77, figs. 39-41.



46022. **Trochonema arctatum** Ulrich. Holotype.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1054, pl. 76, figs. 9, 10.
46023. **Trochonema beachi** Whitfield? Plesiotypes.  
46024. Stones River (Ord.). Minneapolis, Minnesota; Janesville.  
46025. Wisconsin; Dixon, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1048, pl. 77, figs. 9-12.
46076. **Trochonema bellulum** Ulrich. Holotype.  
Stones River (Ord.). Murfreesboro, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1050, pl. 77, figs. 26-29.
46026. **Trochonema beloitense** Whitfield. Plesiotypes.  
46027. Stones River (Ord.). Beloit and Mineral Point, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1048, pl. 78, figs. 1-9.
46077. **Trochonema eccentricum** Ulrich. Holotype.  
Stones River (Ord.). Near Lebanon, Tennessee.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1049, pl. 77, figs. 19-22.
46028. **Trochonema fragile** Ulrich and Scofield. Cotypes.  
46029. Trenton (Ord.). Cannon Falls, Minnesota; Carroll County,  
Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1050, pl. 77, figs. 13-16.
46030. **Trochonema madisonense** Ulrich. Holotype.  
Richmond (Ord.). Madison, Indiana.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1051, pl. 77, figs. 23-25.
46031. **Trochonema niota** (Hall). Plesiotype.  
Stones River (Ord.). Beloit, Wisconsin.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, pl. 76, figs. 16-18.
46032. **Trochonema (Eunema) nitidum** Ulrich. Holotype.  
Utica (Ord.). Covington, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1053, pl. 77, figs. 44, 45.
46033. **Trochonema (Eunema) obsoletum** Ulrich. Holotype.  
Trenton (Ord.). Near Burgin, Kentucky.  
Ulrich, Geol. and Nat. Hist. Surv. Minn., Final Rept., III, Pt. II,  
1897, p. 1054, pl. 76, figs. 6-8.
46034. **Trochonema retrorsum** Ulrich and Scofield. Holotype.  
Black River (Ord.). Goodhue County, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1051, pl. 77, figs. 35-38.



46035. **Trochonema (Eunema) robbinsi** Ulrich and Scofield. Cotype.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1053, pl. 76, figs. 11-15.
46036. **Trochonema rugosum** Ulrich and Scofield. Cotypes.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1049, pl. 77, figs. 19-22.
46037. **Trochonema (Eunema) salteri** Ulrich and Scofield. Holotype.  
Trenton (Ord.). Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1053, pl. 77, figs. 42, 43.
46038. **Trochonema (Eunema) simile** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Wykoff, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1053.
46039. **Trochonema subcrassum** Ulrich and Scofield. Cotypes.  
Trenton (Ord.). Mercer County, Kentucky.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1051, pl. 77, figs. 30-34.
46040. **Trochonema umbilicatum** (Hall). Plesiotypes.  
46041. Trenton (Ord.). Hader and Stewartville, Minnesota,  
46042. and near Galena, Illinois.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1047, pl. 77, figs. 1-3.
46043. **Trochonema umbilicatum canadense** Ulrich and Scofield. Holotype.  
Black River (Ord.). Paquettes Rapids, Ottawa River,  
Canada.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1047, pl. 77, figs. 4-6.
46044. **Trochonema umbilicatum latum** Ulrich and Scofield. Holotype.  
Stones River (Ord.). Tennessee.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 1047, pl. 77, figs. 7, 8.
46045. **Trochonema vagrans** Ulrich and Scofield. Cotype.  
Stones River (Ord.). Minneapolis, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn.,  
III, Pt. II, 1897, p. 1049, pl. 77, fig. 46; pl. 78, fig.
115618. **Trochus decipiens** Guppy.  
115619. Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 435.



13410. **Trochus (Oxystele) euryostomus** White. Cotypes.  
Chico (Cret.). Todos Santos Bay, California.  
White, Bull. No. 22, U. S. Geol. Surv., 1885, p. 12, pl. 5, figs. 9-11.
20120. **Trochus (Anadema) gemiferus** White. Holotype.  
Chico (Cret.). Near Pence's ranch, Butte County, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 17, pl. 4, figs. 8, 9.
2468. **Trochus humilis** Conrad. Holotype.  
Miocene. St. Marys River, Maryland.  
Conrad, Journ. Acad. Nat. Sci. Phila., VI, 1830, p. 219, pl. 9, fig. 5.—Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 405.  
=Calliostoma (Eutrochus) humilis.
115617. **Trochus plicomphalus** Guppy. Holotype.  
Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 435, pl. 18, fig. 17.
14988. **Trochus (Palæotrochus) præcursor** Clarke. Holotype.  
Naples (Dev.). Naples, New York.  
Clarke, Bull. No. 16, U. S. Geol. Surv., 1885, p. 55, pl. 3, figs. 6-9.  
=Palæotrochus præcursor.
23847. **Trochus ? saratogensis** Walcott. Cotypes.  
Upper Cambrian. Four miles west of Saratoga Springs, New York.  
Walcott, Proc. U. S. Nat. Mus., XIII, 1890, p. 268, pl. 20, fig. 3.
162545. **Trophon (Boreotrophon) cerritensis** Arnold. Holotype.  
Pleistocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 249, pl. 6, fig. 6.
20122. **Trophon condoni** White. Cotype.  
Chico (Cret.). Eighteen miles east of Redding, California.  
White, Bull. No. 51, U. S. Geol. Surv., 1889, p. 21, pl. 3, figs. 4, 5.
113273. **Trophon (Aspella) engonatus** Dall. Cotypes.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 243, pl. 13, fig. 6a.
162546. **Trophon (Boreotrophon) stuarti præcursor** Arnold. Holotype.  
Pliocene. Deadman Island, off San Pedro, California.  
Arnold, Mem. Calif. Acad. Sci., III, 1903, p. 253, pl. 6, fig. 5.
24340. **Tropidocyclus gilletianus** (Hartt and Rathbun). Plesiotypes.  
Middle Devonian. Ereré, Brazil.  
Clarke, Archivos do Mus. Rio de Janeiro, X, 1899, p. 40, pl. 3, figs. 10, 11.



46046. **Tryblidium modestum** Ulrich and Scofield. Holotype.  
Black River (Ord.). Near Cannon Falls, Minnesota.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 826, pl. 82, figs. 1, 2.
46047. **Tryblidium unguis** Lindström. Plesiotype.  
Silurian. Island of Gotland.  
Ulrich and Scofield, Geol. and Nat. Hist. Surv. Minn., Final Rept.,  
III, Pt. II, 1897, p. 820, figs. 1b, 1c.
113472. **Tuba acutissima** Dall. Cotypes.  
Oligocene. Alum Bluff, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 319,  
pl. 18, fig. 4a.
9073. **Tubulostium dickhauti** (White). Cotypes.  
135149. Tertiary. Little Rock, Arkansas.  
White, Proc. U. S. Nat. Mus., IV, 1881, p. 138, pl. 1, figs. 12, 13.—  
Harris, Ann. Rept. Geol. Surv. Arkansas, 1872, II, p. 47, pl.  
3, fig. 4.  
See *Spirorbis*? *dickhauti*.
115014. **Tugoniopsis compacta** Dall. Holotype.  
Miocene. Magnolia, Duplin County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898, p. 860,  
pl. 35, fig. 10.
9026. **Tulotoma thompsoni** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 100, pl. 28, figs. 2a-h; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 467, pl. 24, figs. 17-22.
- 158479 **Turbinaria ? alabamensis** Vaughan. Cotypes.  
to Jacksonian or Lowest Oligocene. Salt Mountain, near  
158482. Jackson, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 194, pl. 23,  
figs. 1-3; pl. 24.
111915. **Turbinella chipolana** Dall. Holotype.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 97,  
pl. 10, fig. 7.
111936. **Turbinella regina** Heilprin. Plesiotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
pl. 3, fig. 4.
111924. **Turbinella scolymoides** Dall. Holotype and plesiotype.  
112388. Pliocene. Caloosahatchie River, near Fort Thompson.  
and Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p.  
pl. 3, figs. 2, 5; Pt. II, 1892, p. 229.



158131. **Turbinolia acuticostata** Vaughan. Paratype.  
Pamunky (Eocene). Potomac Creek, Maryland.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 89, pl. 6,  
fig. 13b.
158120. **Turbinolia claibornensis** Vaughan. Cotypes.  
158121. Claibornian (Eocene). Claiborne, Alabama.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 90, pl. 6,  
figs. 14-16b.
158130. **Turbinolia insignifica** Vaughan. Cotypes.  
Red Bluff (Oligocene). Red Bluff, and near Shubuta,  
Mississippi.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 91, pl. 6,  
figs. 17-18.
157514. **Turbinolia pharetra** Lea. Plesiotypes.  
158097 Claibornian and Jacksonian (Eocene). Claiborne, Ala-  
to bama, Montgomery, Louisiana, and Whitlock, Texas.  
158099. Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 86, pl. 6,  
158101. figs. 5-10.
155206. **Turbinolia sulcata** Lamarck. Plesiotype.  
Eocene. Launay, France.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 87, pl. 6, fig. 4.
9836. **Turbinolia texana** Conrad. Cotypes.  
Washita (Lower Cret.). Between El Paso and Frontera,  
Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 144, pl. 2, figs. 3a, b.
158126. **Turbinolia wautubbeensis** Vaughan.  
158127. Holotype and paratype.  
Lower Claibornian (Eocene). Wautubbee, Mississippi,  
and Bienville Parish, Louisiana.  
Vaughan, Mon. XXXIX, U. S. Geol. Surv., 1900, p. 88, pl. 6,  
figs. 11, 12.
23070. **Turbo colusaensis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Wilbur Springs, Colusa  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 66,  
pl. 12, fig. 14.
23072. **Turbo? humerosus** Stanton. Cotypes.  
23073. Knoxville (Lower Cret.). Three miles north of Lowerys,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 67,  
pl. 12, figs. 10, 11.
23071. **Turbo morganensis** Stanton. Cotypes.  
Knoxville (Lower Cret.). Morgan Valley, Lake County,  
California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 66,  
pl. 12, fig. 13.



7903. *Turbo mudgeanus* Meek. Cotypes.  
Mentor (Cret.). Twelve miles southwest of Salina, Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 313.  
= *Margarita mudgeana*.
294. *Turbo nebrascensis* Meek and Hayden. Holotype and para-  
types.  
Montana (Cret.). Yellowstone River, near Miles City,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
= *Margarita nebrascensis*.
23067. *Turbo paskentaensis* Stanton. Cotypes.  
Knoxville (Lower Cret.). Three miles northwest of Pas-  
kenta, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 64,  
pl. 12, figs. 5, 6.
112987. *Turbo rhexogrammicus* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 383,  
pl. 18, figs. 8a, 11.
270. *Turbo tenuilineatus* Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 64.  
= *Spironema tenuilineata*.
23069. *Turbo trilineatus* Stanton. Holotype.  
Knoxville (Lower Cret.). Three miles north of Lowerys,  
Tehama County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 65,  
pl. 12, fig. 12.
23068. *Turbo wilburensis* Stanton. Cotypes.  
Knoxville (Lower Cret.). Near Wilbur Springs, Colusa  
County, California.  
Stanton, Bull. No. 133, U. S. Geol. Surv., 1895 (Feb., 1896), p. 65,  
pl. 12, fig. 15.
160483. *Turbonilla (Pyrgolampros) alderi* Dall and Bartsch. Holotype  
Post-Pliocene. Deadman Island, off San Pedro, California.  
Dall and Bartsch in Arnold, Mem. Calif. Acad. Sci., III, 1903, p.  
280, pl. 1, fig. 9.
107115. *Turbonilla angulata* Guppy. Holotype.  
Oligocene. Vondra, Jamaica, West Indies.  
Guppy, Proc. Zool. Acclimat. Soc. London, 1896, p. 316, pl. 28, fig. 10.
160194. *Turbonilla* (?) Bartsch. Holotype.  
Post-Pliocene. California.  
Dall and Bartsch, Proc. Zool. Acclimat. Soc. London, 1896, p. 316, pl. 28, fig. 10.



113252. **Turbonilla chipolana** Dall. Cotypes.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 258.
7880. **Turbonilla (Chemnitzia?) coalvillensis** Meek. Cotypes.  
Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 505.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p.  
305, pl. 9, figs. 5a-5b.
112376. **Turbonilla (Ondina) fragilis** Dall. Holotype.  
Pliocene. Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
253, pl. 20, fig. 5.
162608. **Turbonilla (Pyrgiscus) latifundia** Dall and Bartsch. Holotype.  
Post-Pliocene. San Pedro, California.  
Dall and Bartsch in Arnold, Mem. Calif. Acad. Sci., III, 1903, p.  
275, pl. 3, figs. 5, 5a.
8655. **Turbonilla (Chemnitzia) melanopsis** Conrad? Plesiotypes.  
Colorado. (Cret.). West crossing of Virgin River, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 197, pl. 18, fig. 10a.  
[Not *Turbonilla melanopsis* Conrad.—T. W. Stanton.]
107078. **Turbonilla (Stylopsis) octona** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 317, pl. 27, fig. 8.
107113. **Turbonilla plastica** Guppy. Holotype.  
Upper Oligocene. Pointapier, Trinidad, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 316, pl. 28, fig. 4.
113251. **Turbonilla protracta** Dall. Cotypes.  
Miocene. Cape Fear River, North Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 261, pl. 13, fig. 11a.
113233. **Turbonilla puncta obsoleta** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 256.
107116. **Turbonilla simplicior** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 317, pl. 28, fig. 1.
148599. **Turbonilla (Strioturbonilla) stearnsii** Dall and Bartsch. Holotype.  
Post-Pliocene. San Diego, California.  
Dall and Bartsch in Arnold, Mem. Cal. Acad. Sci., III, p.  
271, pl. 2, figs. 5, 5a.



107117. **Turbonilla tenuilineata** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 317, pl. 28, fig. 8.
115440. **Turbonilla turris** Orbigny. Plesiotypes.  
Pliocene. Matura, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II, I, 1874, p. 407, pl. 18, fig. 15.
107114. **Turbonilla turritissima** Guppy. Holotype.  
Oligocene. Vendryes, Jamaica, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 316, pl. 28, fig. 5.
451. **Turnus (Goniochasma) stimpsoni** (Meek and Hayden). Holotype and paratype.  
Fort Pierre (Cret.). Musselshell River, Montana.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 256, pl. 30, figs. 9a, 9b.  
See *Xylophaga stimpsoni*.
472. **Turrilites ? umbilicatus** Meek and Hayden. Holotype.  
Fort Pierre (Cret.). Great Bend of Missouri River, below Fort Pierre, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1858, p. 56.  
= *Heteroceras ? umbilicatum*.
271. **Turris (Surcula ?) contortus** (Meek and Hayden). Holotype and paratypes.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 385, pl. 31, figs. 7a-c, and text fig. 49.  
See *Fusus contortus*.
12458. **Turris (Surcula ?) hitzi** Meek. Holotype.  
Fort Benton (Cret.). Opposite Fort Shea, Upper Missouri River.  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 386, text fig. 50, p. 387.
111655. **Turritella æquistriata** Conrad. Plesiotype.  
Miocene. Jericho, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 128, pl. 23, figs. 12-14.
135054. **Turritella alcida** Dall. Cotypes.  
Alum Bluff (Oligocene). Oak Grove, Santa Rosa County, and Rock Bluff, Appalachicola River, Florida.  
Dall, Proc. U. S. Nat. Mus., n. s. 23; Trans. Wagner Free Inst. Sci. Phila., 1899, fig. 26.
113464. **Turritella apicalis** F. Iotypes.  
Pliocene. Caloan, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., pl. 16, fig. 10.



113468. *Turritella apicalis cingulata* (Heilprin). Plesiotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 317,  
pl. 16, fig. 11.
113463. *Turritella apicalis mediosulcata* (Heilprin). Plesiotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 317,  
pl. 16, fig. 12.
113461. *Turritella apicalis tensa* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 317,  
pl. 16, fig. 13.
107085. *Turritella arata* Guppy. Holotype.  
Oligocene. Haiti, West Indies.  
Guppy, Proc. U. S. Nat. Mus., XIX, 1896, p. 319, pl. 28, fig. 3.
135141. *Turritella arenicola branneri* Harris. Holotype.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, II, 1894, p. 169, pl. 6,  
fig. 7.
30240. *Turritella budaensis* Shattuck. Cotypes.  
Buda (Lower Cret.). Near Austin, Texas.  
Shattuck, Bull. No. 205, U. S. Geol. Surv., 1903, p. 31, pl. 19,  
figs. 4, 6.
113442. *Turritella chipolana* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
312, pl. 22, fig. 24.
135142. *Turritella clevelandia* Harris. Holotype.  
Eocene. White Bluff, Arkansas River, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, II, 1894, p. 170, pl. 6,  
fig. 9.
7878. *Turritella coalvillensis* Meek. Cotypes.  
Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 502.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
p. 315, pl. 9, fig. 4a.  
= *Glauconia coalvillensis*.
111659. *Turritella cumberlandia* Conrad. Plesiotype.  
Miocene. Shiloh, New Jersey.  
Whitfield, Mon. XXIV, U. S. Geol. Surv., 1894, p. 129, pl. 23,  
figs. 9-11.
112591. *Turritella gatunensis* Conrad. Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
310, pl. 17, fig. 10.



112589. *Turritella indenta martinensis* Dall. Cotypes.  
Vicksburgian (Eocene). Martin Station, Hernando  
County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
308.
113476. *Turritella indenta mixta* Dall. Cotypes.  
Oligocene. Near Baileys Ferry, Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
309.
13344. *Turritella inezana* Conrad. Cotype.  
Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 195.
157835. *Turritella infragranulata* (Gabb). Plesiotype.  
Lower Tejon (Eocene). One mile north of Pacheco, Cal-  
ifornia.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1044, pl. 66, fig. 3.
9845. *Turritella irrorata* Conrad. Holotype.  
Cretaceous. Between El Paso and Frontera, Texas.  
Conrad, Proc. Acad. Nat. Sci. Phila., VII, 1855, p. 268.  
See *Turritella planilateris*.
7899. *Turritella kansasensis* Meek. Cotypes.  
Mentor (Cret.). Twelve miles southwest of Salina,  
Kansas.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 312.  
= *Mesalia? kansasensis*.
9834. *Turritella leonensis* Conrad. Holotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II,  
1857, p. 165, pl. 21, figs. 7a, 7b.
8055. *Turritella marnochi* White. Cotypes.  
Washita (Lower Cret.). Helotes, Bexar County, Texas.  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879, p. 314,  
pl. 7, figs. 5a, 5b.
112596. *Turritella megalobasis* Dall. Holotype.  
Oligocene. Ballast Point, Tampa, Florida  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 310,  
pl. 17, fig. 11.
22908. *Turritella micron* Plesiotype.  
Colorado (Cret)  
Stanton, Br Pl. 29, fig. 3.



7882. **Turritella (Aclis?) micronema** Meek. Cotypes.  
Colorado (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 504.—  
White, Eleventh Ann. Rept. U. S. Geol. Surv. Terr., 1879,  
p. 316, pl. 9, fig. 8a.
293. **Turritella moreauensis** Meek and Hayden. Holotype.  
Fox Hills (Cret.). Moreau River, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p. 70.  
= *Cerithiopsis moreauensis*.
135153. **Turritella mortoni** Conrad, var. Plesiotype.  
Midwayan (Eocene). Near Bradford, Arkansas.  
Harris, Ann. Rept. Geol. Surv. Arkansas, II, 1894, p. 48, pl. 3,  
fig. 5.
157843. **Turritella pachecoensis** Stanton. Cotypes.  
Lower Tejon (Eocene). One mile north of Pacheco,  
California.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1043, pl. 66, figs. 1, 2.
113459. **Turritella perattenuata** Heilprin. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 316,  
pl. 16, figs. 5, 9.
115452. **Turritella planigyrate** Guppy. Holotype.  
115626. Savanetta, Trinidad, British West Indies.  
Guppy, Geol. Mag., London, Dec. II. I, 1874, p. 408, pl. 18, fig. 5.
9845. **Turritella planilateris** Conrad. Holotype.  
Washita (Lower Cret.). Leon Springs, Texas.  
Conrad, Rept. U. S. Mexican Bound. Surv., Emory, I, Pt. II, 1857,  
p. 158, pl. 14, figs. 1-1b.  
= *Turritella irrorata*.
7870. **Turritella spironema** Meek. Cotypes.  
Montana (Cret.). Coalville, Utah.  
Meek, Sixth Ann. Rept. U. S. Geol. Surv. Terr., 1873, p. 503.—  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I,  
1883, p. 31, pl. 12, fig. 3a.
112342. **Turritella subannulata** Heilprin. Plesiotypes.  
Pliocene. Tillys Lake, Waccamaw River, South Carolina.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 314,  
pl. 16, fig. 2.
113444. **Turritella subannulata acropora** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 315,  
pl. 16, fig. 4.



113446. *Turritella subannulata burnsii* Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 315.
113451. *Turritella subannulata intermedia* Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 316,  
pl. 16, fig. 3.
113450. *Turritella subannulata perincisa* Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 316,  
pl. 16, fig. 1.
113440. *Turritella subgrundifera* Dall. Holotype.  
Oligocene. Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 313,  
pl. 22, fig. 23.
112587. *Turritella tampæ* Heilprin. Holotype.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p. 309,  
pl. 17, fig. 8.
112595. *Turritella tampæ pagodæformis* (Heilprin). Plesiotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892, p.  
310, pl. 17, fig. 9.
112588. *Turritella tampæ tripartita* Dall. Cotypes.  
Oligocene. Ballast Point, Tampa, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 309.
113478. *Turritella terebriformis* (Conrad, ms.) Dall. Plesiotypes.  
Oligocene. Chipola River, Calhoun County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. II, 1892,  
p. 311.
115451. *Turritella tornata* Guppy. Holotype.  
Miocene. Cumana, Venezuela.  
Guppy, Quart. Journ. Geol. Soc. London, XXII, 1866, p. 580, pl.  
26, fig. 12.
1870. *Turritella uvasana* Conrad. Holotype.  
Eocene. Canada de las Uvas, California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
V, 1856, p. 321, pl. 2, fig. 12.  
[Perhaps identical with *T. gatunensis*. W. H. Dall.]



8657. **Turritella uvasana** Conrad. Plesiotypes.  
Colorado (Cret.). Southeast of Paria, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 195, pl. 18, figs. 11a, b.  
= *Turritella whitei*.
13346. **Turritella variata** Conrad. Cotypes.  
Miocene. Santa Inez Mountains, Santa Barbara County,  
California.  
Conrad, Rept. Expl. and Surv. R. R. Miss. Riv. to Pacific Ocean,  
VII, 1857, p. 195, pl. 8, fig. 5.
8657. **Turritella whitei** Stanton. Cotypes.  
22905. Colorado (Cret.). Upper Kanab Valley, Utah, twelve  
22906. miles east of Walsenburg, and Huerfano Park, Colorado.  
22907. Stanton, Bull. No. 106, U. S. Geol. Surv., 1893, p. 130, pl. 28, figs.  
12-16.  
See *Turritella uvasana*.
35150. **Tylocrinus novus** Wood. Holotype.  
Upper Traverse (Dev.). Partridge Point, near Alpena,  
Michigan.  
Wood, Smithsonian Misc. Coll., Quart., XLVII, 1904, p. 66, text  
fig. 4 (p. 67), pl. 16, figs. 5, 5a.
8864. **Tylostoma princeps** White. Holotype.  
Lower Cretaceous. Six miles southwest of Tehuacan,  
Puebla, Mexico.  
White, Proc. U. S. Nat. Mus., III, 1880, p. 141, pl. 2, figs. 1, 2.
112184. **Typhis floridanus** Dall. Holotype.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 152,  
pl. 9, fig. 5.
112183. **Typhis linguiferus** Dall. Holotype.  
Oligocene. Ten-Mile Creek, near Chipola River, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 152,  
pl. 12, fig. 7.
8044. **Uintacrinus socialis** Grinnell. Plesiotypes.  
Colorado (Cret.). Trego County, Kansas.  
Meek, Bull. U. S. Geol. and Geogr. Surv. Terr., II, No. 4, 1876,  
pp. 375-378, text figs. A, B.—Clark, Bull. No. 97, U. S. Geol.  
Surv., 1893, p. 21, pl. 1, fig. 1a.
41382. **Ulrichia (?) confluens** Ulrich. Holotype.  
Warsaw (Miss.). Columbia, Illinois.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 203,  
pl. 12, figs. 11a, b. (Locality wrongly given in work cited.)
41383. **Ulrichia emarginata** Ulrich. Holotype.  
Chester (Miss.). Grayson Springs, Kentucky.  
Ulrich, Journ. Cincinnati Soc. Nat. Hist., XIII, 1890, p. 203,  
pl. 12, figs. 10a-c.



107456. **Ultimus precursor** Dall. Holotype.  
Pliocene. Limon, Costa Rica, Central America.  
Dall, Proc. U. S. Nat. Mus., XIX, 1896, p. 318, pl. 29, figs. 2, 3.
114445. **Umbonium (Solariorbis) duplinense** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 46; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, figs. 8, 9, 10.
113596. **Umbonium (Solariorbis) floridanum** Dall. Holotype.  
Pliocene. Caloosahatchie, Florida.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 45; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, figs. 6, 7.
114446. **Umbonium (Solariorbis) undula** Dall. Holotype.  
Miocene. Natural Well, Duplin County, North Carolina.  
Dall, Proc. U. S. Nat. Mus., XVIII, 1895, p. 46; Trans. Wagner  
Free Inst. Sci. Phila., III, Pt. VI, 1903, pl. 60, figs. 11, 12.
9042. **Unio aldrichi** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 62, pl. 29, figs. 2a-2b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 433, pl. 15, figs. 4, 5.
23123. **Unio barbouri** White. Plastotypes.  
Dakota (Upper Cret.). Five miles west of north of Fair-  
burg, Nebraska.  
White, Proc. U. S. Nat. Mus., XVII, 1894, p. 133, pl. 8, figs. 1-3.
7811. **Unio belliplicatus** Meek. Cotypes.  
Bear River (Cret.). Limestone Hill, Bear River, Utah.  
Meek, Proc. Am. Philos. Soc., XI, 1871, p. 430; Rept. U. S. Geol.  
Expl. 40th Par., IV, Pt. I, 1877, p. 165, pl. 16, fig. 4a.
8146. **Unio belliplicatus** Meek. Plesiotypes.  
Bear River (Cret.). Mouth of Sulphur Creek, Wyoming.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 430, pl. 6,  
figs. 1-3; Bull. No. 128, U. S. Geol. Surv., 1895, p. 34, pl. 2,  
figs. 5, 6.
9051. **Unio brachyopisthus** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 64, pl. 22, figs. 2a, 2b.
107745. **Unio (Unio) caloosaënsis** Dall. Cotypes.  
Pliocene. Caloosahatchie River, near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. IV, 1898,  
p. 688, pl. 25, figs. 6, 12a.
8359. **Unio clinopisthus** White. Holotype.  
Eocene. Washakie Station, Wyoming.  
White, Proc. U. S. Nat. Mus., V, 1882, p. 94, pl. 3, figs. 1, 2;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 434, pl. 28,  
figs. 1, 2.



13404. *Unio condoni* White. Cotypes.  
John Day (Miocene). Eastern Oregon.  
White, Bull. No. 18, U. S. Geol. Surv., 1885, p. 13, pl. 2, figs. 1-3.
9033. *Unio couesi* White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 64, pl. 27, fig. 1a; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 432, pl. 16, fig. 1.
12503. *Unio cryptorhynchus* White. Holotype.  
Laramie (Cret.). Dog Creek, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 68, pl. 24, figs. 1a-1b; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 431, pl. 14, fig. 6.
12483. *Unio cryptorhynchus* White. Plesiotype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 431, pl. 14, fig. 7.
2163. *Unio danæ* Meek and Hayden. Holotype and paratype.  
Laramie (Cret.). Bad Lands of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1857, p. 145.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 517, pl. 41, figs. 3a-c.
9021. *Unio danæ* Meek and Hayden? Plesiotype.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 68, pl. 27, figs. 2a, 2b; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 433, pl. 18, figs. 1, 2.
21175. *Unio deweyanus* Meek and Hayden. Holotype and paratype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1857, p. 145.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 519, pl. 41, figs. 2a-c.—White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 431, pl. 17, figs. 4, 5.
9022. *Unio endlichi* White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 66, pl. 26, figs. 1a-1b; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 432, pl. 15, figs. 1, 2.
20048. *Unio felchii* White. Cotypes.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 16, pl. 1, figs. 1-5.
9043. *Unio goniambonatus* White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883, p. 63, pl. 29, figs. 1a-1b; Third Ann. Rept. U. S. Geol. Surv., 1883, p. 433, pl. 19, figs. 3, 4.



9035. **Unio gonionotus** White. Cotypes.  
Laramie (Cret.). Upper Kanab, Southern Utah.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 71, pl. 26, figs. 2a, 2c-e; Third Ann. Rept. U. S. Geol.  
Surv., 1883, p. 433, pl. 13, figs. 7, 9, 10.
8869. **Unio haydeni** Meek. Cotypes.  
Eocene. Near Fort Bridger, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila. for 1860, p. 312; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 364, pl. 5, figs. 11a, 11b.
9041. **Unio holmesianus** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 67, pl. 22, figs. 4a-e; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 433, pl. 16, figs. 2-6.
20051. **Unio iridoides** White. Cotype.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 17, pl. 2, figs. 3, 4.
20052. **Unio lapilloides** White. Cotype.  
Jurassic. Eight miles north of Canyon City, Colorado,  
and Como, Wyoming.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 18, pl. 2, figs. 5, 6.
20050. **Unio macropisthus** White. Cotype.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 17, pl. 2, fig. 7.
7833. **Unio meekii** White. Cotypes.  
Bridger (Eocene). Church Buttes, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 43, pl. 19, fig. 1a.
8873. **Unio mendax** White. Cotypes.  
Eocene. Canyon of Desolation, Utah.  
White, Bull. U. S. Geol. and Geogr. Surv. Terr., III, 1877, p. 605;  
Third Ann. Rept. U. S. Geol. Surv., 1883, p. 433, pl. 18, figs.  
3-5; Bull. No. 34, U. S. Geol. Surv., 1886, p. 20, pl. 4, figs. 2-4.  
See *Unio vetustus*.
7719. **Unio (Baphia?) nebrascensis** Meek. Cotypes  
Dakota (Cret.). Dakota County, Nebraska.  
Meek, Fourth Ann. Rept. U. S. Geol. Surv. Terr., 1871, p. 303.  
= *Margaritana nebrascensis*.
196. **Unio nucalis** Meek and Hayden. Cotypes.  
Jurassic. Southwest base of Black Hills, South Dakota.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., 1858, p. 52; Pal.  
Upper Mo., Smithsonian Contr. to Knowl. No. 172, XIV,  
1884, p. 92, pl. 3, figs. 13a-c.—White, Third Ann. Rept. U. S.  
Geol. Surv., 1883, p. 426, pl. 3, fig. 4; Bull. No. 29, U. S.  
Geol. Surv., 1886, p. 19, pl. 3, figs. 3-7.



12474. **Unio primævus** White. Cotypes.  
Laramie (Cret.). South of Cow Island, Missouri River,  
Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 70, pl. 29, fig. 3b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 432, pl. 14, figs. 4, 5.
2162. **Unio priscus** Meek and Hayden. Holotype and paratypes.  
2180. Laramie (Cret.). Forty miles above mouth of Yellow-  
stone River, and Judith River, above Bad Lands,  
Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., VIII, 1856, p.  
117.—Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 516,  
pl. 43, figs. 8a-c.—White, Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 432, pl. 14, fig. 1.
9036. **Unio proavitus** White. Cotypes.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 65, pl. 22, figs. 3a-d; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 433, pl. 13, figs. 3-6.
9052. **Unio propheticus** White. Holotype.  
Laramie (Cret.). Black Buttes Station, Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 65, pl. 22, fig. 5a; Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 433, pl. 15, fig. 3.
20061. **Unio rectoides** White. Cotypes.  
20062. Eocene. Wales, Utah, and near Nacimiento, New Mexico.  
White, Bull. No. 34, U. S. Geol. Surv., 1886, p. 21, pl. 4, fig. 1;  
pl. 5, figs. 1, 2.
8141. **Unio senectus** White. Cotypes.  
12478. Laramie (Cret.). Dog Creek, Montana.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 69, pl. 28, figs. 1a-c; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 432, pl. 19, figs. 1, 2.
8098. **Unio shoshonensis** White. Cotypes.  
8099. Eocene. White River Valley, northwestern Colorado,  
and southern Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 41, pl. 19, figs. 2, 2b; Third Ann. Rept. U. S. Geol. Surv.,  
1883, p. 435, pl. 28, fig. 3.
8849. **Unio stewardi** White. Cotypes.  
Jurassic. Flaming Gorge, Northern Utah.  
White, Third Ann. Rept. U. S. Geol. Surv., 1883, p. 426, pl. 3,  
fig. 1.
20053. **Unio stewardi** White. Plesiotypes.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 19, pl. 3, figs. 1, 2.



2164. **Unio subspatulatus** Meek and Hayden. Holotype.  
Laramie (Cret.). Mouth of Judith River, Montana.  
Meek and Hayden, Proc. Acad. Nat. Sci. Phila., for 1857, p. 146.—  
Meek, Rept. U. S. Geol. Surv. Terr., IX, 1876, p. 518, pl. 41,  
figs. 1a, 1b.—White, Third Ann. Rept. U. S. Geol. Surv., 1883,  
p. 431, pl. 14, figs. 2, 3.
20049. **Unio toxonotus** White. Holotype.  
Jurassic. Eight miles north of Canyon City, Colorado.  
White, Bull. No. 29, U. S. Geol. Surv., 1886, p. 17, pl. 2, figs. 1, 2.
492. **Unio vetusta** Meek. Cotypes.  
Bear River (Cret.). Bear River near mouth of Sulphur  
Creek, Wyoming.  
Meek, Proc. Acad. Nat. Sci. Phila., for 1860, p. 312; Rept. Expl.  
Great Basin of Utah, Simpson, 1876, p. 361, pl. 5, figs. 12a, 12b.  
= *Unio vetustus*.
8591. **Unio vetustus** Meek. Plesiotypes.  
Eocene. Wales, Sanpete County, Utah.  
White, Rept. U. S. Geogr. Surv. W. 100th Merid., IV, Pt. I, 1876,  
p. 206, pl. 21, figs. 12a-d.  
= *Unio mendax*.
7764. **Unio vetustus** Meek. Plesiotypes.  
8147. Bear River (Cret.). Bear River near mouth of Sulphur  
Creek, Wyoming.  
Meek, Rept. U. S. Geol. Expl. 40th Par., IV, Pt. I, 1877, p. 164,  
pl. 16, figs. 5a, b.—White, Third Ann. Rept. U. S. Geol. Surv.,  
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1895, p. 35, pl. 3, figs. 1-4.  
See *Unio vetusta*.
9006. **Unio washakiensis** Meek. Plesiotypes.  
9007. Eocene. White River, Colorado, and Church Buttes,  
Wyoming.  
White, Twelfth Ann. Rept. U. S. Geol. Surv. Terr., Pt. I, 1883,  
p. 42, pl. 19, figs. 2a, 2b.
112171. **Urosalpinx trossulus curtus** Dall. Holotype.  
Pliocene. Caloosahatchie River near Fort Thompson,  
Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 148,  
pl. 7, fig. 12.
112173. **Urosalpinx trossulus subsidus** Dall. Holotype.  
Pliocene. Shell Creek, De Soto County, Florida.  
Dall, Trans. Wagner Free Inst. Sci. Phila., III, Pt. I, 1890, p. 148.
157844. **Urosyca caudata** Gabb. Plesiotype.  
Lower Tejon (Eocene). Army Point near Benicia, Cali-  
fornia.  
Stanton, Seventeenth Ann. Rept. U. S. Geol. Surv., Pt. I, 1897,  
p. 1047, pl. 67, fig. 6.











